

A SERVICE IN TRANSITION:
FORGING AN INTEGRATED INSTITUTIONAL IDENTITY
FOR THE UNITED STATES AIR FORCE

BY
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APPROVAL

The undersigned certify that this thesis meets master's-level standards of research, argumentation, and expression.

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DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.

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ABSTRACT

The United States Air Force is in the midst of a significant institutional transition. As noted by Dr. Thomas P. Ehrhard, Air Force culture has always been centered on the man, the machine, and the choreography of flight—the combat pilot, the aircraft, and the aviation system. In its current manifestation, the pilots of the Combat Air Force have assumed the iconic warrior role because they, unlike the rest of their service, are the only ones who deliver ordnance. As the standard-bearers of the warrior class around whom the service culture revolves, the bomber and fighter pilots of the Combat Air Force exert the most significant influence within the organization. Of the two, the fighter pilot now sits atop the Air Force caste system. This social stratification has resulted in the development of a permanent underclass and created rifts within the service that have eroded the warfighting potential of the entire organization. The Air Force has evolved into an institution in which ability means less than being in the proper career field for advancement and command opportunity. In the aftermath of the 2008 dismissal of the Secretary of the Air Force and the Air Force Chief of Staff, the time is now ripe for the United States Air Force to forge a new institutional identity and warfighting ethos that reflects its entire force structure.

This study asks how the Air Force should forge that new identity. It opens with an examination of the general issue of organizational culture and the current institutional identity of the Air Force. This sets the stage for a historical analysis of the evolution of the Air Force's identity from its establishment as a separate service in 1947 until the dismissal of Secretary of the Air Force Michael Wynne and Chief of Staff of the Air Force General T. Michael Moseley in 2008. This is followed by a brief consideration of the role that tribalism and technology play in inhibiting adoption of a service-wide universal institutional identity and analysis of three important factors that influence institutional identity: the Air Force's initial officer training program, its organizational structure, and its promotion policies. Each area is examined for dysfunctional practices that give power and influence to a single community of officers, rather than to officers throughout the Air Force structure.

The thesis concludes by recommending the following changes: overhauling the enculturation training by increasing the length of the Air and Space Basic Course and the Squadron Officer School; adding a cross-domain orientation course focused on the complementary roles of air, space, and cyberspace at both schools; and reversing the leadership-focused training of the Squadron Officer School with the comprehensive enculturation training of the Air and Space Basic Course. Changes must also be made to the types of officers selected to command certain units by allowing both rated and non-rated general officers to lead flying Major Commands. Finally, the Air Force must significantly reduce its use of the below primary zone promotion. Implementing these measures will allow the Air Force to forge an integrated institutional identity that is relevant to its present and future challenges in air, space, and cyberspace.

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Introduction

The issue here is not whether pilots should dominate the Air Force—the fact is they do. Rather, a more interesting phenomenon is that persons who sit on top of the world's most powerful air force are almost exclusively fighter pilots; yet, their institution and its doctrine were created before World War II by bomber pilots.

--Michael Worden

The only thing harder than getting a new idea into the military mind is to get the old one out.

--Basil H. Liddell Hart

Background

Since the inception of the United States Air Force (USAF), pilots have always occupied the bulk of the leadership positions even though they comprise only a small percentage of its officer cadre. Today, pilots comprise less than 28 percent of its officer cadre. Within the pilot corps, aircraft types define the groups that compete for power; and in the Air Force, there are three—the fighter, bomber, and mobility communities. Of these three, first the bomber and then the fighter generals have dominated the senior leadership positions.¹ From its inception in 1947 until 1982, bomber generals ruled the Air Force.² However, beginning with General Charles A. Gabriel, the fighter community emerged supreme and assumed a solid line of Chiefs of Staff that ended with General T. Michael Moseley’s dismissal in 2008 (see Table 1 on the next page).

The decline of the bomber generals and the rise of the fighter generals in the 1980s was an evolutionary change that culminated in the early 1990s with the end of the Cold War.³ Chief of Staff General Merrill A. McPeak, a fighter pilot intent on significantly reducing the bomber community’s influence on the Air Force, instituted a

¹ In this thesis, the term senior leadership will refer to three-star and four-star general officers.

² It is understandable that at World War II’s conclusion this would be the case. In 1947, the role the USAF was tasked to perform was delivery of atomic weapons utilizing manned strategic bombers. This purpose reflected the Cold War demands and resulted in the Air Force assuming the lead role in national security in the years immediately following World War II. Strategic bombardment advocates fully promoted both the independent nature of airpower and the primacy of manned bombers in the nuclear deterrence mission.

³ Mike Worden described this change of leadership in his book *Rise of the Fighter Generals: The Problem of Air Force Leadership, 1945–1982*, (Maxwell Air Force Base, AL: Air University Press, 1998). Worden argued that fighter pilots rose to power because bomber generals failed to adjust to changing realities related to America’s failure in Vietnam and the growing conventional Soviet threat in Europe.

number of comprehensive policies to ensure that the corporate takeover would remain in place.⁴ Just five months after the Soviet Union's dissolution, McPeak disbanded the very symbol of bomber supremacy, Strategic Air Command (SAC), and placed bomber units under the control of the fighter-dominated Air Combat Command.⁵ With this one step, McPeak set the conditions for the fighter community's disproportionate domination of Air Force senior leadership positions that continues to this day. Currently, only 6.6 percent of officers in the Air Force are fighter pilots, yet they currently occupy 50 percent of the four-star general officer positions and command 33 percent of the major commands.⁶ More telling, however, is the fact that the last eight Air Force Chiefs of Staff prior to General Norton A. Schwartz were fighter pilots. Before General Schwartz's appointment, fighter pilots constituted an elite group that significantly influenced, if not outright controlled, the Air Force's strategic direction.

Table 1. Air Force Chiefs of Staff

Name	Aircraft	Dates	Name	Aircraft	Dates
Curtis E. LeMay	Bomber	1961-1965	Michael J. Dugan	Fighter	1990-1990
John P. McConnell	Bomber	1965-1969	Merrill A. McPeak	Fighter	1990-1994
John D. Ryan	Bomber	1969-1973	Ronald Fogleman	Fighter	1994-1997
George S. Brown	Bomber	1973-1974	Michael E. Ryan	Fighter	1997-2001
David C. Jones	Bomber	1974-1978	John P. Jumper	Fighter	2001-2005
Lew Allen, Jr.	Bomber	1978-1982	T. Michael Moseley	Fighter	2005-2008
Charles A. Gabriel	Fighter	1982-1986	Norton A. Schwartz	Mobility	2008-pres
Larry D. Welch	Fighter	1986-1990			

Source: 2009 USAF Almanac⁷

⁴ Thomas P. Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services: A Comparative Study of Weapons System Innovation" (PhD diss., Johns Hopkins University, 2000), 90.

⁵ Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services," 90.

⁶ The following USAF active-duty demographics information is current as of March 31, 2010 and was found at the Air Force Personnel Center's (AFPC) official website: <http://www.afpc.randolph.af.mil/library/airforcepersonnelstatistics.asp>. There were 65,349 officers on active duty. Of these, AFPCs data is limited to O-1 through O-5 for rated officers (49,007 total). The Air Force has 13,706 pilots, 4,091 navigators, 1,377 air battle managers and 29,903 nonrated line officers in the grades of lieutenant colonel and below. Of the pilots, 3,264 are classified by AFPC as fighter-pilots. As of 06 May 2010, there are 14 generals in the USAF, seven of which are fighter pilots. Information derived from the Air Force official biographies site at: <http://www.af.mil/information/bios/results.asp>.

⁷ Chiefs of Staff prior to LeMay were not classified as either fighter or bomber pilots. Although Generals Carl Spaatz, Hoyt Vandenberg, and Thomas White flew pursuit aircraft early in their careers, all three commanded bomber forces during World War II and were strong advocates of strategic bombing.

The leadership change that occurred in 2008 was both traumatic and unprecedented. It was much different than the evolutionary change that occurred when fighter pilots of Tactical Air Command (TAC) gradually wrested control away from the bomber pilots during the transitional decade of the 1970s.⁸ Rather, it was a revolutionary change when, for the first time, control was bequeathed to an Airman who was not a pilot of the Combat Air Force by an external actor, the Secretary of Defense.⁹ This unanticipated turn of events propelled the Air Force into the midst of the institutional transition it is currently experiencing.

The ramifications of this unexpected ascension of a special operations and mobility general to the top of the Air Force hierarchy places the Air Force in a position in which it is now possible to redefine itself. Since its inception, the Air Force's institutional identity has always revolved around the combat pilot.¹⁰ In its current manifestation, the pilots of the Combat Air Force (CAF) have assumed the warrior icon role because they, unlike the rest of their service, are the ones who deliver ordnance. As the self-proclaimed standard bearers of the warrior class around whom the service culture revolves, the bomber and fighter pilots of the CAF have been disproportionately promoted and exert the greatest organizational influence.¹¹ Of these two, the fighter generals currently dominate Air Force senior leadership positions. However, this deification of the CAF, and the fighter pilot in particular, threatens the current health and vitality of the service because it has led to development of a permanent underclass of the lesser tribes.

When dominant groups change, organizational transformation can be difficult even if it leads to the betterment of the institution. As new groups wrest domination away from the old elite, a changing of the guard often accompanies a change in institutional direction. Whether this changing of the guard is internally or externally

⁸ Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services," 89.

⁹ The Combat Air Force encapsulates all aircraft of Air Combat Command capable of kinetic delivery of ordnance. This includes all fighter and bomber planes and excludes tanker and airlift assets. Tankers and airlifters are part of the Mobility Air Force.

¹⁰ Mobility pilots are not considered combat pilots since they do not deliver ordnance in battle. As such, the perception, although erroneous, is that they are insulated from the risks of flying in a combat environment.

¹¹ Of the 14 four-star generals currently active, eight rose through the ranks of the Combat Air Force. Information for General Officers derived from Air Force official biographies site at: <http://www.af.mil/information/bios/results.asp>.

driven, the institution can benefit if it adopts different practices that benefit the entire organization rather than the previously favored few. In the aftermath of the 2008 dismissal of the Secretary of the Air Force and the Air Force Chief of Staff, the time is now opportune for the Air Force to institute such a change by forging a new institutional identity that recognizes and rewards the efforts of its entire force structure.¹²

Research Question

This thesis answers the following question: “What steps should the Air Force take to transition from being a service that traditionally favors a single community to one that appropriately recognizes and rewards its multiple communities?” In assessing this issue, this study will examine the options the Air Force can take to take to redefine its institutional identity.

Mike Worden, in his book *Rise of the Fighter Generals*, described how senior leadership in the Air Force transitioned from being an organization dominated by bomber pilots to one dominated by fighter pilots. Using historical data, he detailed the environment that led to this internally generated transfer of power. He did not investigate, however, whether lasting institutional transition could occur when a change mandated by external forces was opposed by a majority of the ruling elite. Worden looked back at history to explain why one transition of leadership inexorably occurred; this study will show why the 2008 leadership transition initiated by the Secretary of Defense was also anticipatable.

Sources of Information

The evidence for this thesis comes from a wide array of primary and secondary sources. Primary sources include the Air Force Personnel Center on-line publications, papers related to the establishment of the Air and Space Basic Course found in the Air University archives, doctrinal publications, biographic information concerning senior Air Force leaders, and personal interviews with concerned academics and senior military leaders. Secondary sources include academic studies of institutional identity, works dealing with the identification of military sub-cultures such as Carl Builder’s *The Masks*

¹² For the remainder of this study, “institutional identity” and “service culture” will refer to the same phenomenon and means “the mystical cords of the mind that bind all members to their fellow service members and to their institution as a whole.” This definition was derived from Marine Corps Warfighting Publication (MCWP) 6-11. *Leading Marines*. 27 November 2002, 8.

of War, studies of shifting patterns of Air Force leadership such as Mike Worden's *Rise of the Fighter Generals: The Problem of Air Force Leadership, 1945-1982* and Laura Lenderman's *The Rise of Air Mobility and Its Generals*, and various journal articles dealing with issues of institutional identity in the Air Force and other services. Additional information, especially those regarding cultural opinions, is largely drawn from documents housed in the Air Force Historical Research Agency, and from autobiographies of senior leaders.

Outline of the Study

The thesis opens with an examination of the general issue of institutional identity and the particular role identity plays in military institutions. This examination sets the stage for a historical analysis of the Air Force's institutional identity from the establishment of the Air Force as a separate service in 1947 until the dismissal of Secretary of the Air Force Michael Wynne and Chief of Staff of the Air Force General T. Michael Moseley in 2008. Then follows a brief review of the complex problem the Air Force faces in forging an institutional identity. The argument then proceeds to examine three important factors that influence institutional identity: the Air Force's initial officer training program, its organizational structure, and its promotion policies. Each area is examined for practices that contribute to the long-held institutional habit of giving power and influence to a single community of officers, rather than to officers throughout the Air Force structure. The study concludes by recommending changes in each of the three aforementioned areas: initial training, organizational structure, and the promotion system.

To study any organization, it is useful to begin by briefly reviewing organizational theory. This review will investigate Edgar H. Schein's theory on organizational culture and Warren G. Bennis's ideas on the cultural factors that obstruct organizational change. The following segment will also investigate the different service cultures or "masks of war" each military service wears and will conclude by evaluating how the Air Force derived its current institutional identity.¹³

¹³ "Masks of war" refer to the façade each service constructs to hide its institutional self-interests from the other services. These masks of war result from an inherent service culture which is a product of the service's history and the personality types of its key leaders. Carl H. Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, (Baltimore, MD: The Johns Hopkins University Press, 1989), 12.

Chapter 1

The Role of Institutional Identity

Every organization has a culture, that is, a persistent, patterned way of thinking about the central tasks of and human relationships within an organization. Culture is to an organization what personality is to an individual. Like human culture generally, it is passed on from one generation to the next. It changes slowly if at all.

--James Q. Wilson

Culture is an abstraction, yet the forces that are created in social and organizational situations that derive from culture are powerful. If we don't understand the operation of these forces, we become victim to them.

--Edgar H. Schein

The above statements capture the key points of organizational culture—a patterned way of abstract social thinking, focused on central tasks and relationships, passed on by generations that is slow to change and difficult to understand by outsiders. This chapter begins with an overview of Edgar H. Schein's theory of organizational culture followed by a brief analysis of Warren G. Bennis's thoughts on the cultural factors that obstruct organizational change. The remainder of the chapter investigates the different service cultures of the American armed forces, paying particular attention to the stratified sub-cultures of the Air Force.

Organizational Culture Theory

According to James M. Smith, every organization's institutional identity revolves around what is variously called its *essence* or the beliefs of the *corps* around its *core*.¹ This essence, or corps around its core beliefs, is significantly influenced by actions of the leadership elite responding to perceived changes in the external environment. Schein agrees with this description. As the preeminent social psychologist of the day, Schein's book, *Organizational Culture and Leadership*, is widely regarded as the seminal work on how organizational culture develops and the role leadership plays in influencing that

¹ James M. Smith, *USAF Culture and Cohesion: Building an Air and Space Force for the 21st Century* (USAF Academy, CO: USAF Institute for National Security Studies, 1998), 2.

culture. Schein begins by stating that “culture and leadership are two sides of the same coin, neither of which can be understood by itself.”² On the one hand, cultural norms delineate how an organization defines leadership. This is critical in determining who gets promoted and who gains the attention of followers.³ On the other hand, “the only thing of real importance that leaders do is to create and manage culture, with the ultimate responsibility to destroy that culture when it becomes dysfunctional.”⁴ Thus, in Schein’s schema, leadership and culture conceptually intertwine.

Schein views culture as a dynamic set of structures, rules, and norms that surrounds an organization at all times, being constantly created by its member’s interactions and shaped by leadership behavior.⁵ Formally defining culture as “a pattern of shared basic assumptions learned by the group as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid,” Schein contends that cultural development is the product of the basic human psychological need for environmental stability and consistency.⁶ Accordingly, when a group achieves a cultural identity that provides consistency, that identity becomes a major stabilizing force that is not easily abandoned.⁷ This does not suggest that an organization’s culture cannot be changed. On the contrary, Schein believes that because leadership drives organizational culture, it is obligated to effect cultural change when the assumed cultural beliefs and values cease to serve the best interests of the institution. In order to do this effectively, leadership must first understand what organizational culture is and how it develops.

Culture can be analyzed using the three levels provided in Schein’s pyramid.⁸ These levels range from the tangible overt manifestations that one can see and feel to the deeply embedded, unconscious, basic assumptions that Schein argues form the essence of culture.⁹ The first tier is the *level of artifacts*, which includes all phenomena that an

² Edgar H. Schein, *Organizational Culture and Leadership*, 3rd ed. (San Francisco, CA: Jossey-Bass Publishers, 2004), 10.

³ Schein, *Organizational Culture and Leadership*, 11.

⁴ Schein, *Organizational Culture and Leadership*, 11.

⁵ Schein, *Organizational Culture and Leadership*, 1.

⁶ Schein, *Organizational Culture and Leadership*, 17.

⁷ Schein, *Organizational Culture and Leadership*, 14.

⁸ The term *level* in Schein’s model refers to the degree to which cultural phenomenon is visible to the observer. Schein, *Organizational Culture and Leadership*, 25.

⁹ Schein, *Organizational Culture and Leadership*, 25.

individual sees, hears, and feels when encountering a new group with an unfamiliar culture.¹⁰ The second level contains the *espoused beliefs and values* of an organization. Initially, espoused beliefs and values reflect nothing more than the desires of group leadership in an immature organization. However, as the organization experiences success in joint group action, these values and beliefs become shared perceptions and eventually shared assumptions embraced by the entire group if they meet two conditions.¹¹ First, only those beliefs and values that can be empirically tested to work reliably in solving the group's problems will make the transformation into a group assumption.¹² Second, if empirical testing is not possible, group members must perceive that the beliefs and values work, a process Schein refers to as *social validation*.¹³ As members reinforce each others' aesthetic beliefs and values, they come to be taken for granted and enter the level of assumptions. Those who fail to accept such assumptions run the risk of being excluded from the group.¹⁴

Underlying assumptions form the third and deepest level of organizational culture in Schein's model. Serving as the ultimate source of group values and actions, assumptions become so subconsciously ingrained as a result of repeated success that group members find behavior based on any other premise inconceivable.¹⁵ Noted organizational theorist Ralph Kilmann supports Schein's position when he states "the real power of culture resides in the tacit assumptions that underlie it. These habitual ways of seeing and thinking about the world are like automatic pilots. They are powerful because

¹⁰ This level encompasses visible organizational structures and processes, to include products, language, technology, style, published values, and observable rituals and ceremonies. For purposes of analysis, the artifact level also includes the processes and structural elements by which the behaviors of an organization's members are made routine. Schein stresses that the most important point to be made about this level is that it is both easy to observe and difficult to decipher. He cautions against inferring deeper assumptions from artifacts alone as they would undoubtedly be colored by one's own feelings and reactions. Schein, *Organizational Culture and Leadership*, 25-27.

¹¹ Schein, *Organizational Culture and Leadership*, 28.

¹² Schein, *Organizational Culture and Leadership*, 28.

¹³ When discussing social validation, Schein is referring to aesthetic or moral matters which cannot be empirically tested at all. For example, any given culture cannot prove that its religion or moral system is superior to another culture's religious or moral system. But if the members reinforce each other's beliefs and values, they come to be taken for granted. Such beliefs and values typically involve the group's internal relations; the test of whether they work or not is how comfortable and anxiety-free members are when they abide by them. Schein, *Organizational Culture and Leadership*, 29.

¹⁴ Schein, *Organizational Culture and Leadership*, 29.

¹⁵ Schein, *Organizational Culture and Leadership*, 31.

people rarely think about them, though they influence almost everything people do.”¹⁶ Schein warns of the dangers of these automatic pilots because they tend to become non-confrontable and non-debatable, making them extremely hard to change even after they cease to serve the organizational purpose.¹⁷ However, changing an organizational culture is not only possible but encouraged in Schein’s schema if and when assumptions become dysfunctional. To Schein, leadership has a significant influence on culture as it moves through the different stages of organizational development, namely from its founding and early growth, through its mid-life, to its maturity and decline stage.

The stages of organizational evolution provide leadership with different possibilities for effecting cultural change due to the particular function that culture plays at each developmental stage.¹⁸ For example, when an organizational culture is in the founding and early growth stage, the main cultural identity comes from the founding leadership and its initial assumptions.¹⁹ During this stage, institutional identity changes are more readily accepted by the group because it is not uncommon for the founders to have to redefine organizational assumptions frequently in response to anxieties caused by external crises of survival.²⁰ Schein argues that at this early stage leaders must recognize the pivotal role they play not only in creating culture, but also in embedding and developing the proper culture for organizational survival.²¹ In emphasizing leadership’s role on early culture creation, Schein warns leaders not to become too wedded to their own initial assumptions if the external operating environment changes and those assumptions prove to be incorrect.²² Failure of leadership to respond effectively to this pitfall may well result in organizational demise.

Because founding leaders tend to have strong assumptions about how an organization should operate, the efficacy of their theories get tested first. If their assumptions are wrong and they fail to adapt them, the group tends to fail early in its

¹⁶ Ralph H. Kilmann et al., *Gaining Control of the Corporate Culture* (San Francisco, CA: Jossey-Bass Publishers, 1985), 268.

¹⁷ Schein, *Organizational Culture and Leadership*, 31.

¹⁸ Schein, *Organizational Culture and Leadership*, 292.

¹⁹ Schein, *Organizational Culture and Leadership*, 292.

²⁰ Schein, *Organizational Culture and Leadership*, 293.

²¹ Schein, *Organizational Culture and Leadership*, 226.

²² Schein, *Organizational Culture and Leadership*, 243.

history.²³ If their assumptions are correct, however, a powerful institution with a firm cultural identity evolves in the organizational mid-life stage. At this stage, Schein argues that culture now becomes more of a cause than effect and that it may unduly influence not only strategy and structure, but also the ways in which group members relate to each other.²⁴ Instead of appropriately adapting to changes in the external operating environment, organizational culture now serves as an anxiety-reducing placebo that group members continue to take even when the organization is struggling to survive.²⁵ Schein offers two options leaders can pursue to prevent this from occurring. The first rests in the diversity of a mid-life organization's sub-cultures. According to Schein, to prevent cultural stagnation, successful leaders must systematically promote people from the organizational sub-culture not emotionally embedded to the original culture into power positions.²⁶ By doing so, leadership can direct the total culture toward shared assumptions of the selected sub-culture, thereby placing the organization into a better position to assess and respond to needed future directions.²⁷ The only disadvantage in this change mechanism is that it is slow to take effect. If the pace of cultural change has to be increased, a second option is available. This entails changing the composition of the dominant groups or coalitions in an organization by infusing outsiders into the leadership elite.²⁸ In effect, this destroys the group or hierarchical sub-culture that was the originator of the original culture and starts a process of new culture formation.²⁹ Schein urges caution in using this approach due to the high levels of anxiety that can occur when competing cultural assumptions are brought into conflict. If managed culture change through infusion of outsiders is pursued, leadership must develop techniques to manage the cultural conflict they may unwittingly unleash.³⁰

In Schein's schema, the final stage of organizational development occurs when an organization, bound together by a strong unifying culture, matures to a point that "culture now defines what is to be thought of as leadership . . . and how authority and power are to

²³ Schein, *Organizational Culture and Leadership*, 243.

²⁴ Schein, *Organizational Culture and Leadership*, 408.

²⁵ Schein, *Organizational Culture and Leadership*, 408.

²⁶ Schein, *Organizational Culture and Leadership*, 303.

²⁷ Schein, *Organizational Culture and Leadership*, 303.

²⁸ Schein, *Organizational Culture and Leadership*, 306.

²⁹ Schein, *Organizational Culture and Leadership*, 307.

³⁰ Schein, *Organizational Culture and Leadership*, 309.

be allocated and managed.”³¹ In this stage, the culture which leadership creates either blindly perpetuates itself or creates new definitions that are at odds with the changing environmental reality.³² To rectify this situation in a mature and possibly declining organization, Schein suggests that leadership find a process to empower a potential leader with the insight and ability to overcome the cultural assumptions constraining the organization.³³ Although some of these leaders may come from within the organization, Schein contends that formally designated senior managers of a given organization may neither be willing or able to spearhead the needed culture change.³⁴ What is then needed is leadership that either comes from organizational sub-culture outliers or from the outside. Both types must have the skill to first learn what the present state of the culture is, unfreeze it, redefine and change it, and then refreeze the new assumptions into an organizational culture that reflects the environmental reality.³⁵

Warren G. Bennis builds on Schein’s ideas but takes a rather more jaded approach to organizational culture.³⁶ Bennis maintains that an unconscious conspiracy in contemporary society prevents leaders from taking charge of their organizations and making changes.³⁷ According to Bennis, an entrenched bureaucracy committed to the status quo continually seeks to undermine the efforts of the trusting leader.”³⁸ Largely to blame for this phenomenon are social forces that reflect the friction that exists between the good of the common group versus that of individual sub-groups.³⁹ The strife that results resists leadership’s desire to effect organizational change, especially during times of cultural transformation. Bennis does, however, offer a way to counter the turmoil and inertia that threatens organizational restructuring.⁴⁰ For Bennis, the answer lies in leadership’s ability to create an empowered organization that promulgates the leader’s

³¹ Schein, *Organizational Culture and Leadership*, 409.

³² Schein, *Organizational Culture and Leadership*, 409.

³³ Schein, *Organizational Culture and Leadership*, 409.

³⁴ Schein, *Organizational Culture and Leadership*, 410.

³⁵ Schein, *Organizational Culture and Leadership*, pp 314, 410.

³⁶ Warren G. Bennis, “Why Leaders Can’t Lead,” in *Classic Readings in Organizational Behavior*, ed. J. Steven Ott, 2d ed. (Orlando, FL: Harcourt Brace & Company, 1996), 220-227. In this article, Bennis claims that there’s an “unconscious conspiracy” aimed at sabotaging leader’s plans and undermining organizational vision. Entrenched bureaucracy, self-deception at the senior management level, and mind-numbing routines are among the members of this conspiracy.

³⁷ Warren G. Bennis, “Why Leaders Can’t Lead,” 221.

³⁸ Warren G. Bennis, “Why Leaders Can’t Lead,” 221.

³⁹ Warren G. Bennis, “Why Leaders Can’t Lead,” 221.

⁴⁰ Warren G. Bennis, “Why Leaders Can’t Lead,” 221.

vision rather than one preoccupied with checks and balances and controlled by people who want to exploit the system.⁴¹ In the end, however, both Bennis and Schein agree that organizational culture and leadership are equally important in determining institutional effectiveness.

The next section will analyze the institutional identities of the Air Force and US Navy. Analysis is limited to these two services due to their organizational similarity. The Navy, like the Air Force, is a technologically-oriented service composed of many factions and interests. Unlike the Air Force, however, the Navy has been more effective in defining itself as an institution and incorporating its sub-cultures into dominant leadership positions.⁴²

Service Cultures of the American Armed Forces—The Masks of War

When studying the American armed forces, Stephen Rosen wrote that “each service is far from monolithic” and that all services should be regarded as “complex political communities in which the central concerns are those of any political community: who should rule and how should the citizens live.”⁴³ Carl H. Builder agrees. In his book, *The Masks of War: American Military Styles in Strategy and Analysis*, Builder analyzes the three largest service cultures and shows that each is quite distinct.⁴⁴ Builder demonstrates that “like all individuals and durable groups, the military services have acquired personalities of their own shaped by their external experiences that, in turn, shape their behavior.”⁴⁵ Because the bulk of organizational culture literature falls short

⁴¹ Warren G. Bennis, “Why Leaders Can’t Lead,” 227.

⁴² This is a bold statement, but it is one supported by the facts. When comparing the lineage of the US Navy’s Chief of Naval Operations (CNO) from 1961 to the present (the same time frame investigated in Table 1), 6 surface warfare, 6 aviators, and 3 submariners filled this billet. In the last twenty years, every dominant sub-culture has had at least one member serve as CNO. Information derived from Biographies in Naval History located on the Naval Historical Center site at: <http://www.history.navy.mil/faqs/faq35-1.htm>

⁴³ Stephen P. Rosen, *Winning the Next War: Innovation and the Modern Military*, (Ithaca, NY: Cornell University Press, 1991), 19.

⁴⁴ Builder limits his analysis to the US Army, Navy, and Air Force. He omitted the US Marine Corps and US Coast Guard because neither enters the defense planning arena as an independent institutional actor with a significant voice in the national approach to strategy or military force planning. This is mainly due to their respective institutional subordination to the Department of the Navy and Department of Transportation. Carl H. Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, (Baltimore, MD: The Johns Hopkins University Press, 1989), 9.

⁴⁵ Builder, *The Masks of War*, 7. Builder does concede that his findings have shortcomings because treating institutions as if they were individuals raises several troublesome issues. “Even for individuals, personality sketches can be misdrawn. Therefore, the discernment of personality remains an art, not a science.” Furthermore, because institutions normally comprise a large number of individuals, an institution’s personality is more than the sum of its complex human individuals. Therefore, the issue of *complexity*

when analyzing military cultures, Builder's study contains useful insights.⁴⁶ By capturing the essence of American service cultures, Builder succeeds in extracting the fundamental service-centric ideas that differentiate one service from the other. These service-centric ideas, according to Builder, have "become so familiar as to be hidden from view."⁴⁷ By looking past the veneers that services use to screen their motives or self-interests, the mask of war that each service wears becomes evident.⁴⁸ To Builder, only after becoming aware of a service's culture can one understand its past, present, and future behavior.⁴⁹

By decoding the cultural assumptions of the Air Force, we will be better able to understand why this service has evolved into one that traditionally favors the sub-culture of only a single community or tribe. The following analysis of service identities will follow Builder's method of analysis by examining five aspects of service personality to reveal differences between the two services. These aspects are: altars of worship, concerns with self measurement, preoccupation with toys versus the arts, the influence of intra-service distinctions among elites and subgroups, and insecurities about service legitimacy and relevance.⁵⁰

Altars of Worship

An *altar of worship* is the principle or ideal that each service cherishes the most. To help one understand this construct, Builder provides a few examples. "For the knights

alone increases the risk of misdrawing an institution's personality. Despite these shortcomings, former Senator Sam Nunn opines that Builder's provocative insights provides people with a better understanding of the American military services and helps them comprehend why the different services act as they do. Builder, *The Masks of War*, pp. ix, 8.

⁴⁶ Ehrhard contends that the bulk of organizational literature falls short "because it tends to measure internal departmental styles, such as sales versus accounting, or inter-organizational styles, e.g., how one company differs from another." Ehrhard also states that fundamental organizational differences between military and non-military institutions will always exist since military cultures run deeper. "That is, they tend to elicit more dissimilarity with other groups and more internal homogeneity in behavior and worldview." Thomas P. Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services: A Comparative Study of Weapons System Innovation" (PhD diss., Johns Hopkins University, 2000), 92-93.

⁴⁷ Builder, *The Masks of War*, 8.

⁴⁸ Builder's masks of war refer to the façade each service constructs to hide its institutional self-interests from the other services. These masks of war result from an inherent service culture which is a product of the service's history and the personality types of its key leaders. To Builder, service culture manifests itself in a variety of ways including the service's budget priorities, doctrine, and officer training, evaluation and assignment criteria. Builder, *The Masks of War*, 12.

⁴⁹ Builder, *The Masks of War*, 8.

⁵⁰ The five aspects, or faces, of the service personalities are first introduced on page 17 in Chapter 2. Builder, *The Masks of War*, 8.

of old, the altar might be the code of chivalry. For the hippies or flower children of the 1960s, it might be love.”⁵¹ At the most basic level, the Air Force worships at the altar of technology, while the Navy worships at the altar of tradition.⁵² “If tradition is the altar at which the Navy worships, then one of the icons on that altar is the concept of independent command at sea, which, like the Holy Grail, is to be sought and honored by every true naval officer.”⁵³ This truism is accepted by all three dominant sub-cultures of the Navy: the surface warfare community (also called the surface line), the nuclear submarines, and the aviators who fly from and command aircraft carriers.⁵⁴ Because the Navy has a seafaring culture revolving around the man, the ship, and their struggle against the sea, the ship’s captain plays a pivotal, metaphysical role.⁵⁵ Accordingly, the only path of advancement to senior leadership positions for Navy line officers runs through the bridge of a ship, with command of a capital ship being the ultimate prize.⁵⁶

Most people readily accept Builder’s claim that the Air Force worships at the altar of technology. After all, it was the technologically marvelous gift of the airplane that helped to secure the Air Force’s independence from the Army in 1947. If flight is a gift of technology, and if the expansion of that technology poses the only limits on that gift’s freedom, then the inexhaustible fountain of technology ensures an open-ended future for the Air Force.⁵⁷ To early airpower advocates, the airplane was the ultimate manifestation of technology. Because the pilot assumed the risk of both flight and combat, he became the service’s natural leader and the center point around which the entire culture revolved.⁵⁸ From this cultural focal point, command of a *flying wing* became the Holy Grail, to be sought and honored by every true pilot. Because non-pilot officers could not lead a flying wing, command of a non-flying wing became their only alternative. For

⁵¹ Builder, *The Masks of War*, 18.

⁵² The service omitted from this discussion, the US Army worships at an altar that is less apparent than that of the other two services. That may be because Army ideals are more diffuse and subtle according to Builder. Since the Army is the most loyal servant of the US, its institutions and its people, if the Army worships at an altar, the object worshipped is the country and the means of worship are service. Builder, *The Masks of War*, 19-20.

⁵³ Builder, *The Masks of War*, 18.

⁵⁴ Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” 81.

⁵⁵ Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” 99.

⁵⁶ Capital ships of the Navy are its most important warships and the ones with the heaviest firepower. Currently, these include guided missile cruisers for the surface warfare community, nuclear ballistic missile submarines for the submariners, and nuclear aircraft carriers for the aviators.

⁵⁷ Builder, *The Masks of War*, 19.

⁵⁸ Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” 97.

both pilots and non-pilots, the advancement path to senior leadership positions remained the same and ran through the command suite of a wing.⁵⁹

In his follow-on book, *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the US Air Force*, Builder discusses the challenge the Air Force faces in worshiping at the altar of technology. Builder contends that the Air Force “has identified itself with the air weapon and rooted itself too deeply in a commitment to technological superiority.”⁶⁰ The disadvantage of this overarching commitment has “transformed [technological pursuit] into an end in itself where [more advanced] aircraft or systems, rather than missions, becomes the primary focus.” This focus on aircraft or systems results in loyalty being given to airframes or commands first instead of to the organization, resulting in a weaker sense of community than that held by the other military services.⁶¹ This tendency, coupled with the lack of an integrating vision that adequately recognizes the contributions of its non-pilot sub-cultures, develops weak membership ties to the institution as a whole.⁶²

Somewhat counter to Builder’s focus on the negative cultural aspects of the Air Force’s fascination with technology as its chosen altar of worship in *The Icarus Syndrome*, Thomas P. Ehrhard’s doctoral dissertation, “Unmanned Aerial Vehicles in the United States Armed Services: A Comparative Study of Weapons System Innovation,” offers some practical reasons for this infatuation. Because aviation is a demanding activity that relies on cutting-edge technology to maintain America’s aerospace dominance, the Air Force is compelled to foster this profoundly “technophilic” culture to attract like-minded people, pilots and non-pilots alike, to ensure its continued survival.⁶³

⁵⁹ As of May 2009, there were 21 flying wings and 5 non-flying wings in Air Combat Command, 10 flying wings and 7 non-flying wings in Air Education and Training Command, 33 non-flying wings in Air Force Materiel Command, 4 space wings, 3 missile wings, and 9 non-flying wings in Air Force Space Command, 2 flying wings, 2 flying groups, and 1 non-flying group in Air Force Special Operations Command, 13 flying wings and 6 non-flying wings in Air Mobility Command, 8 flying wings and 1 non-flying wing in Pacific Air Command, and 5 flying wings and 3 non-flying wings in United States Air Force in Europe. Information derived from “Major Commands 2009 USAF Almanac” located at: <http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509MajCom.pdf>.

⁶⁰ Carl H. Builder, *The Icarus Syndrome: The Role of Air Power in the Evolution and Fate of the U.S. Air Force*, (New Brunswick, NJ: Transaction Publishers, 1996), 6.

⁶¹ Builder, *The Icarus Syndrome*, 6.

⁶² Builder, *The Icarus Syndrome*, 6.

⁶³ Ehrhard supports this statement by pointing to the fact that Air Force enlisted personnel are typically more educated and technically capable than the enlisted force of the other three services and stay in the service longer. For instance, 79% of Air Force enlisted members have college experience, compared to 3%

“This endows the Air Force with a culture tied to technological momentum, one naturally looking forward to new worlds transformed by their aerospace technology rather than backward at history—the only service thus disposed.”⁶⁴ To do anything else would undermine the institutional health of the service.

Measuring Themselves: The Institutional Standard of Service Health

When considering how military services measure themselves against some institutional standard of health, it frequently boils down to the budget (see Figure 1). Arnold Kanter maintains that “for the services, the size of their budgets – both absolutely and relative to those of the other services – is *the* measure of organizational success.”⁶⁵

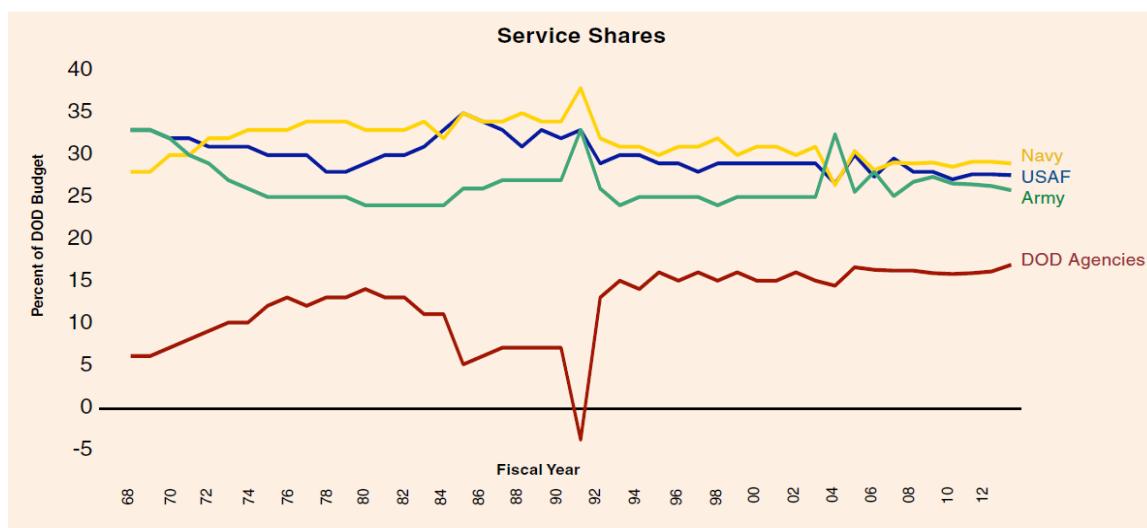


Figure 1. Service Share Percent of the DOD Budget

Source: 2009 USAF Almanac⁶⁶

Considering that the service shares of the budget have remained remarkably stable over the past forty-plus years, Builder searches more deeply to discover the yardstick by which

in the Marine Corps, 5% in the Navy, and 10% in the Army. Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” 98.

⁶⁴ Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” 98.

⁶⁵ Arnold Kanter, *Defense Politics: A Budgetary Perspective* (Chicago, IL: University of Chicago Press, 1979), 5, quoted in Builder, *The Masks of War*, 20.

⁶⁶ The trend for the last 40 years has remained relatively stable with Army receiving 25%, Air Force 30%, Navy 30% of the defense budget. In 2008 and 2009, the Air Force received 28.0%. Information derived from “The Air Force in Facts and Figures 2009 USAF Almanac” located at: http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509facts_fig.pdf.

the services choose to measure themselves and how important these measurements are to them.⁶⁷

Of all the services, Builder views the Navy as the biggest hypochondriac.⁶⁸ Deeply concerned about its size, any reduction first in the number of capital ships and then, so that the capital ships will be properly supported, in the numbers of auxiliary ships, is met with acute anxiety.⁶⁹ This anxiety is not confined to simply one particular sub-culture. Because the surface, submarine, and aviation elements deploy together as part of the carrier battle-group, any shortfall of one type of capital ship limits the Navy's ability to conduct sustained forward-deployed operations. Builder finds it interesting that the peacetime Navy's appetite for ships has remained essentially unchanged since before World War I, even though the type of capital ship has changed from the battleship to the carrier.⁷⁰ "Quick to question its ability to make do when it is short a capital ship, the Navy is equally quick to rebuff any questioning of the forward deployment needs that drive this requirement."⁷¹ Caught up in a vicious cycle of taking its own temperature and finding it lacking, the service presents a united front when addressing the ramifications of the Navy's seemingly permanent inadequacies.

Contrary to the Navy's measurement metric, the Air Force is less concerned about total size and far more concerned about the qualitative technological superiority of its aircraft.⁷² This has fostered an insatiable appetite for newer and more technologically advanced equipment.⁷³ Mike Worden concurs with Builder's assessment. Finding that the Air Force's obsession with technology was a feature of its service infancy, Worden observes that "the Air Force funneled most of its research and development funds toward making bigger airplanes fly faster, higher, and farther at a time when many in the Army and a few in the Air Force were calling for alternative technologies for smaller [close air

⁶⁷ The service omitted from this discussion, the US Army, measures itself by focusing on the end strength of its active component (not counting the Guard and reserves). When talking about size, the Army is referring to number of common soldiers in the ranks and not equipment. Builder, *The Masks of War*, 20.

⁶⁸ Builder, *The Masks of War*, 21.

⁶⁹ Builder, *The Masks of War*, 21.

⁷⁰ Builder, *The Masks of War*, 21.

⁷¹ Builder, *The Masks of War*, 21.

⁷² Builder, *The Masks of War*, 21.

⁷³ Builder, *The Masks of War*, 21.

support] airplanes that flew slower, lower, and closer.⁷⁴ As a result, the Air Force, when measuring itself, “is likely to speak first of the kind or quality of its aircraft (speed, altitude, maneuverability, range, armament) and then the numbers.”⁷⁵ This commitment to qualitative superiority as a measurement of institutional health led Builder to find that the way to get the Air Force’s attention was to confront it with a superior machine. “To be outnumbered may be tolerable, but to be outflown is not.”⁷⁶ This passion for having the very best weapons brings us to the third feature that defines a service’s culture in Builder’s schema, toys versus the arts.

Toys versus the Arts

To Builder, “the things that attract and hold the attention of service professionals at the individual level provide an insight into service preoccupations that go deeper than the assertions of the institution itself.”⁷⁷ This section addresses the question, “with what do people in the military services tend to identify themselves?”⁷⁸

Each service places a different emphasis on its equipment versus the basic skills of its Soldiers, Sailors, Airmen, or Marines.⁷⁹ Builder found the Navy and Air Force resided at opposite sides of the spectrum. The Navy is far less toy-oriented than the Air Force, even though it has a greater variety of airborne and seaborne toys to play with.⁸⁰ Although the assets the Navy operates are clearly a source of interest and pride for those who operate them, the one thought that pervades the service culture throughout all three of its dominant sub-cultures is a love for ships and the sea.⁸¹ This common seafaring

⁷⁴ Mike Worden, *Rise of the Fighter Generals: The Problem of Air Force Leadership, 1945-1982*, (Maxwell Air Force Base, AL: Air University Press, 1998), 37. For an another discussion of the negative implications of the Air Force’s focus on making bigger aircraft [strategic bombers] that flew faster, higher, and farther on Tactical Air Command in the immediate post World War II years, I encourage the reader to refer to Thomas A. Hughes, *Over Lord: General Pete Quesada and the Triumph of Tactical Air Power in World War II*, (New York, NY: The Free Press, 1995), 304-314.

⁷⁵ Builder, *The Masks of War*, 21.

⁷⁶ Builder, *The Masks of War*, 22.

⁷⁷ Builder, *The Masks of War*, 22-23.

⁷⁸ Builder, *The Masks of War*, 22.

⁷⁹ The service omitted from this discussion, the US Army, has historically preferred basic soldiering skills over that of equipment. The Army, like the Marines, is singularly focused on ground combat and views the infantryman/rifleman as the foremost toy in their arsenal. Lately, however, the Army seems to be moving toward the other services attachment to machines as it becomes smaller and more mechanized. The Abrams tank, the Bradley fighting vehicle, and the Apache helicopter have begun to assume the color of institutional toys in Builder’s opinion. Builder, *The Masks of War*, 24.

⁸⁰ Builder, *The Masks of War*, 23.

⁸¹ Builder, *The Masks of War*, 23.

identification has led Navy personnel to give allegiance to the institution as a whole over that of their particular community. This loyalty to institution extends even to Navy fliers. Builder offers two citations from noted naval historian Vincent Davis to support his position.⁸² “Whereas the Army aviators under General Billy Mitchell following World War I had continually agitated for a new aviation service separate from the Army, the Navy fliers had always been Navy officers first and aviators second.”⁸³ The reason these seagoing aviators identified so strongly with the institution, unlike their Army counterparts, was simple: they possessed a “stronger affection to their service than to their aviation units.”⁸⁴

Standing in stark contrast to the Navy, the Air Force is, by far, the most attached to its toys.⁸⁵ This affinity for machines, according to William C. Thomas, “breeds a tendency toward occupationalism in the service.”⁸⁶ Builder further suggests that when it comes to association, the pride goes to the machine first and the institution second.⁸⁷ Because flying is seen by Air Force officers as the *raison d'être* for their existence, “Air Force pilots often identify themselves with an airplane first: I'm a [C-] 141 driver . . . I flew buffs.”⁸⁸ Sometimes this identification even goes down to a particular model of airplane, “I fly F-15C's not F-15E's.” Builder warns that this pull toward occupationalism has dangerous consequences because prideful association to a particular aircraft or Air Force Specialty Code (AFSC) overrides loyalty to the institution.⁸⁹ The

⁸² Vincent Davis is a retired Naval Reserve captain with a total of 34 years of commissioned service which included assignments as an intelligence officer and naval aviator. Dr. Davis is currently serving as the Patterson Chair Professor at the University of Kentucky's Patterson School of Diplomacy and International Commerce and has formally taught at Princeton, Dartmouth, the Graduate School of International Studies, the Naval War College, and the Center for Strategic and International Studies. He is considered to be an expert in his field.

⁸³ Vincent Davis, *Post War Defense Policy and the US Navy, 1943-1946* (Chapel Hill, NC: University of North Carolina Press, 1966), 120, quoted in Builder, *The Masks of War*, 24.

⁸⁴ Davis, *Post War Defense Policy*, 45, quoted in Builder, *The Masks of War*, 24.

⁸⁵ Builder, *The Masks of War*, 23.

⁸⁶ Maj William C. Thomas, “The Cultural Identity of the US Air Force,” *Air & Space Power Journal*, 30 January 2004, <http://www.airpower.maxwell.af.mil/airchronicles/cc/thomas.html> (accessed 21 February 2010). Builder agrees with Thomas' statement but suggests that this tendency is stronger with pilots and with time in the service. He credits this on the USAF's dependency on technology and on specialists. Additionally, Builder concludes, “it will be difficult to slow the tendencies toward occupationalism if the institution has no core identity.” Builder, *The Icarus Syndrome*, 8-9.

⁸⁷ Builder, *The Masks of War*, 23.

⁸⁸ “Buff” stands for Big Ugly Fat Fellow; it is an affectionate term used by B-52 air crewmen to identify their aircraft. Builder, *The Masks of War*, 23.

⁸⁹ Builder, *The Masks of War*, 23.

obvious hazard, he argues, is that “if the machines were to move en masse to another institution, the loyalty would transfer with the aircraft.”⁹⁰ This trend toward occupationalism in the Air Force leads us to the fourth feature that defines a service’s culture, intra-service distinctions.

Intra-service Distinctions: How the Services Separate Themselves

Builder argues that all services make intra-service distinctions among their members, particularly their officers, on the basis of their specialties or skills.⁹¹ “They differ, however, in how these distinctions are made and used.”⁹² Because each service varies widely in how it separates its complex organizations into subsidiary units and components, the manner in which it divides itself provides important clues on what a service thinks is important and what it is about.⁹³

Of all the services, the Navy is, without a doubt, the most segmented.⁹⁴ “The implicit intra-service distinctions among its various components, branches, and activities provide an extensive, fine structured, hierarchical pecking order from top to bottom.”⁹⁵ Three dominant sub-cultures comprise this hierarchy: the “black shoe” surface warfare officers that man naval warships, the “brown shoe” aviators that fly both land and ship-based aircraft, and the “felt shoe” submariners. At the top of the pyramid since World War II (WW II) sits the brown shoe carrier-based aviator.⁹⁶ At the bottom sits the mine warfare community with the submarine and surface warfare specialties, in that order, lying in between.⁹⁷ But in Builder’s opinion the distinctions go further. Among aviators, carrier pilots are above land-based fliers, and attack submarines are favored above ballistic missile launchers.⁹⁸ Nearer the bottom of the hierarchical pile are amphibious surface warfare officers and land-based patrol aviation.⁹⁹ Although these distinctions usually divide careers at the beginning, blending does occur at the O-6 (captain) and

⁹⁰ Builder, *The Masks of War*, 23.

⁹¹ Builder, *The Masks of War*, 25.

⁹² Builder, *The Masks of War*, 25.

⁹³ Builder, *The Masks of War*, 25.

⁹⁴ Builder, *The Masks of War*, 25.

⁹⁵ Builder, *The Masks of War*, 25.

⁹⁶ Builder, *The Masks of War*, 25.

⁹⁷ Builder, *The Masks of War*, 25.

⁹⁸ Builder, *The Masks of War*, 25.

⁹⁹ Builder, *The Masks of War*, 25.

above levels. Regardless of the platform, if a naval officer has a successful independent command tour at sea, he automatically becomes eligible for advancement to admiral.

The Navy fosters the notion that every new line officer is a potential candidate for the Navy's top job, the Chief of Naval Operations (CNO); and history supports this promise.¹⁰⁰ For much of the post-WWII period, the Navy has maintained a balance in its senior leadership among its three dominant sub-cultures. "The record shows that the Navy has retained its feudal structure by allowing a rotation between the three main communities into the CNO position."¹⁰¹ In fact, when comparing the CNO lineage from 1961 to the present, six surface warfare, six aviators, and three subsurface officers have filled this position.

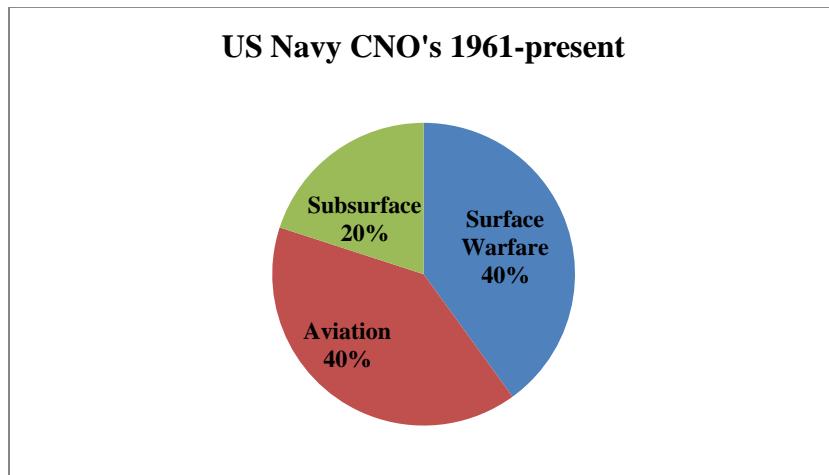


Figure 2. Subculture Distribution of US Navy Chiefs of Naval Operations

Source: Naval Historical Center

In the last twenty years, each sub-culture has had at least *one* member serve as CNO.¹⁰² Builder argues that this feudal leadership mix leads naval officers to see themselves as

¹⁰⁰ Builder, *The Masks of War*, 25.

¹⁰¹ Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services," 82. To Ehrhard, a "feudal structure" is characterized by a balance of power arrangement between leaders of relatively equal subgroups. This is in direct contrast to a "monarchic structure" characterized by concentration of power at the service chief level by a single dominant subgroup who keeps the peace by distributing side payments to subordinate subgroups. The Air Force and Marine Corps fall into this category in Ehrhard's construct since fighter-pilots (USAF) and infantry officers (USMC) dominate the senior leadership positions of their respective organizations. Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services," 74.

¹⁰² Information derived from Biographies in Naval History located on the Naval Historical Center site at: <http://www.history.navy.mil/faqs/faq35-1.htm>.

naval officers first and specialists second, despite the strong intra-service distinctions and well-defined pecking order of their service.¹⁰³

The Air Force is quite different from the Navy in that it has a two-caste system of intra-service distinction: pilots and all others.¹⁰⁴ Of these two, pilots are collectively on a plateau far above all others, including flight-crew members and ballistic missile officers.¹⁰⁵ Nevertheless, all pilots in the Air Force are not created equal. In this regard, there always has existed a “first among equals” in the pilot hierarchy. Ehrhard argues that the first-among-equals mentality of the Air Force leads to a monarchic hierarchical service structure.¹⁰⁶ History supports Ehrhard’s argument, for in the 1950s and 60s, the dominant bomber pilot sub-culture held the majority of senior leadership positions, and from the 1980s until 2008, the fighter-pilots have ruled.¹⁰⁷ This does not imply, however, that a feudal power arrangement has never occurred in the Air Force. Rather, the two dominant Air Force tribes, the bomber and fighter communities, engaged in a struggle in the 1970s that led to a feudal bipolarity in the power structure.¹⁰⁸ This feudality ended in 1982 when General Charles A. Gabriel claimed the monarchy after becoming the first fighter pilot Chief of Staff of the Air Force.¹⁰⁹

So what significance does the Air Force’s preference for a monarchic service structure have on those members who are not part of the dominant tribe? Simply put, because the Air Force Chief of Staff has traditionally risen through the ranks of the

¹⁰³ Builder, *The Masks of War*, 26.

¹⁰⁴ Builder, *The Masks of War*, 26.

¹⁰⁵ Kanter, *Defense Politics*, 108, quoted in Builder, *The Masks of War*, 26.

¹⁰⁶ Ehrhard, “Unmanned Arial Vehicles in the United States Armed Services,” 88-91. To Ehrhard, a “monarchic structure” is characterized by concentration of power at the service chief level by a single dominant subgroup who keeps the peace by distributing side payments to subordinate subgroups. Ehrhard, “Unmanned Arial Vehicles in the United States Armed Services,” 74.

¹⁰⁷ Ehrhard, “Unmanned Arial Vehicles in the United States Armed Services,” 91.

¹⁰⁸ Ehrhard, “Unmanned Arial Vehicles in the United States Armed Services,” 89. Peg Neuhauser, a recognized organizational conflict expert, writes of “tribes” existing within organizations who are continually competing for dominance. All tribes have their own dialects, values, histories, ways of thinking, and rules for appropriate behavior. Tribalism will be explored fully in Chapter 3 when we detail the Air Force’s historical evolution and how it came to obtain its current institutional identity. Peg Neuhauser, *Tribal Warfare in Organizations*, (Cambridge, MA: Ballinger Publishing Company, 1988), 4.

¹⁰⁹ Even though General Norton A. Schwartz is the first non-fighter pilot Chief of Staff since 1982, it was an externally mandated change made by the Secretary of Defense. Since it was not an internally driven transition of power, it does not satisfy Ehrhard’s requirement since an unequal balance of power still exists amongst the Air Force’s top leadership since fighter-pilots still comprise 50% (7/14) of the four-star positions. Information on General Officers derived from USAF official biographies site at:

<http://www.af.mil/information/bios/results.asp>.

dominant tribe that controlled the Air Force, the impression of unbalanced tribal advancement breeds discontent among the remaining tribes. To Builder, “if leadership is only limited to certain pilots, then even greater mischief will result, for such self-serving elitism sows the seeds of discontent among those whose contributions have been denigrated and who have been excluded from any hope of leadership.”¹¹⁰ Builder further suggests that unless the Air Force can foster a sense of “togetherness” like that held by the Navy, it will forever be consigned to suffer open tribal conflict.¹¹¹ The key to fostering this togetherness, according to Builder, is to develop a unifying cause.¹¹² Failure to do so will only threaten the institutional legitimacy of the service, which is the fifth and final foundational feature of a services institutional identity.

Institutional Legitimacy and the Struggle for Relevancy

Builder defines institutional legitimacy as “the confidence of the service in its rightful independent status.”¹¹³ He defines relevance as “the persistence of [a service’s] missions and capabilities.”¹¹⁴ Both are important because they determine service approaches to strategy, analysis, and military planning.¹¹⁵ When examining the three services, Builder noted that “if institutional concerns about the legitimacy and relevancy of a military service were plotted as orthogonal vectors, the three services would be found widely separated at three of the four corners.”¹¹⁶ Of all the services, the Army is

¹¹⁰ Builder, *The Icarus Syndrome*, 227.

¹¹¹ Builder, *The Icarus Syndrome*, 205. Builder goes on to compare and contrast the two services when he states: “The Navy, like the Air Force, is composed of many factions and interests, sometimes competing and jostling each other to be heard or to get their way within the institution. Unlike the Air Force, however, the Navy has had a clearly defined and declared mission (unifying cause) throughout the past 50 (even 100) years, whereas the Air Force seems to have lost touch with its mission during the last 30 years. The wrestling over the leadership of the Navy by the carrier aviators, the submariners, and the surface warfare specialists is appropriate: It is about where the future of the Navy lies and, therefore, whose perspective should most influence the future evolution of the Navy.” Builder, *The Icarus Syndrome*, 226.

¹¹² Builder highlights the negative consequences the Air Force has suffered by focusing exclusively on airplane and pilots instead of developing a unifying cause (comprehensive airpower theory) that incorporated the efforts of its many sub-cultures. Builder states that “in the absence of a unifying cause, the Air Force fractionated into factions devoted to missiles, space, and different kinds of airplanes. The aviators, by right of history and seniority, retained control of the institution; but their evident affection for their airplane created a caste and, hence, competition among the factions. What emerged was an institution devoted to disparate means more than to unifying ends, with destructive effects upon institutional morale, dedication, and values. Builder, *The Icarus Syndrome*, 35.

¹¹³ Builder, *The Masks of War*, 27.

¹¹⁴ Builder, *The Masks of War*, 27.

¹¹⁵ Builder, *The Masks of War*, 27.

¹¹⁶ Builder, *The Masks of War*, 27. Orthogonal means “relating to or composed of right angles.”

most secure in its organizational legitimacy and continuing relevance.¹¹⁷ For the Navy and the Air Force, Builder concluded that each stare at the other from opposite corners of the orthogonal spectrum.¹¹⁸

The Navy is supremely confident in its legitimacy as an independent institution and proudly embraces its 224-plus year history of maintaining freedom of action on the seas.¹¹⁹ As the only seaborne branch of the Department of Defense (DOD), the Navy is secure in the knowledge that no other branch can perform its Title 10 responsibilities.¹²⁰ However, with the arrival of long-range aviation and nuclear weapons that threatened the survival of its ships and anchorages, the Navy's relevance came into question after 1945.¹²¹ According to James Lacy, "US naval power ceased to be something explainable in its own right and assessable in its own terms."¹²² Advocates of strategic airpower, expounding on the virtues of the airplane and atomic bomb, argued "that airpower had proven to be decisive in ending WW II, and since there would never be a major conventional war fought without nuclear weapons, large armies and navies were now obsolete."¹²³

The Navy admirals, seeing that their service's relevance was being called into questions, vehemently disagreed. Believing that wars could not be won by strategic bombing alone, with or without the use of nuclear weapons, the Navy requested funding to build a fleet of flat-deck supercarriers capable of carrying the large, long-range bombers needed to carry the multi-ton nuclear weapons of the day. The Navy, seeing the

¹¹⁷ Builder points out that the Army derives its resolute sense of security in its idea that "there may be air campaigns and support from the sea, but in the end, someone has to take and hold the ground." Builder, *The Masks of War*, 30.

¹¹⁸ Builder, *The Masks of War*, 29.

¹¹⁹ Builder, *The Masks of War*, 29.

¹²⁰ The Navy's Title 10 responsibilities are defined as: "The Navy, within the Department of the Navy, includes, in general, naval combat and service forces and such aviation as may be organic therein. The Navy shall be organized, trained, and equipped primarily for prompt and sustained combat incident to operations at sea. It is responsible for the preparation of naval forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Navy to meet the needs of war." *United States Code Title 10*, 2009 edition, Subtitle C, Chapter 507, Section 5062(a). Information derived from Cornell University Law School site located at: http://www.law.cornell.edu/uscode/10/usc_sec_10_00005062---000-.html (accessed 22 February 2010).

¹²¹ Builder, *The Masks of War*, 29.

¹²² James L. Lacy, *Within Bounds: the Navy in Postwar American Security Policy* (Center for Naval Analyses, CNA 05 83 1178, 28 July 1983), 2, quoted in Builder, *The Masks of War*, 29.

¹²³ Lacy, *Within Bounds*, 19, quoted in Builder, *The Masks of War*, 29.

awesome power of nuclear weapons, was fighting the Air Force over which service should have the nuclear delivery role during the Cold War. The Air Force argued that the best way to deliver nuclear weapons was by strategic bomber, while the Navy believed that nuclear-armed bombers launched from carriers would be, if not more effective, then at least a viable alternative to entrusting the nation's entire nuclear deterrence force to a land-based bomber force susceptible to sabotage or preemptive attack. This debate ultimately led to the 1949 "Revolt of the Admirals." In this revolt, Air Force and Navy leadership carried on a public debate in congressional hearings on the viability of their rival service's proposed nuclear delivery systems, the Air Force's B-36 Peacemaker strategic bomber and the Navy's supercarrier.¹²⁴ The issue was ultimately decided in the Air Force's favor when political leaders determined, in light of strict budget restraints, that national strategy for nuclear war was best served by strategic bombers.

In spite of this decision, the Navy developed a strategic vision that marginalized this hazard to its relevance in the Cold War era. Dismissing nuclear war as being much less likely than a protracted conventional war, Navy advocates pointed to the Korean and Vietnam Wars to support its position.¹²⁵ Moreover, with the end of the Cold War, the Navy became even more committed to its conventionally oriented strategic vision.¹²⁶ Continuing its trend of promoting a clearly defined unifying cause that reflected national security objectives, the Navy comprehensively incorporated all its sub-culture elements into its warfighting doctrine, a tendency that continues to this day.¹²⁷

When it comes to organizational legitimacy and continuing relevance, the Air Force stands in stark contrast to the Navy. As the nation's youngest service, one whose

¹²⁴ It is interesting to note that during this Revolt, leading Admirals from all three of the dominant sub-cultures came to the Navy's defense and actively participated in this debate. This is in keeping with the Navy's propensity to see themselves as naval officers first and specialists second. For a complete discussion of the circumstances which led to this incident, I encourage the reader to see Jeffrey G. Barlow's, *Revolt of the Admirals: The Fight for Naval Aviation, 1945-1950* (Washington, DC: Naval Historical Center, 1994).

¹²⁵ Builder, *The Masks of War*, 29.

¹²⁶ Navy Doctrine Publication (NDP) 1 states this best when it says: "Clearly, the uses of military force are being redirected toward regional contingencies and political persuasion, moving away from the prospect of all-or-nothing global war with another superpower. Nevertheless, a significant theme of this publication is that our Naval Services' fundamental missions have not changed. Our nation's continued existence is tied to the seas, and our freedom to use those seas is guaranteed by all our naval forces."

Navy Doctrine Publication (NDP) 1. *Naval Warfare*. 28 March 1994, iv.

¹²⁷ Navy Doctrine Publication (NDP) 6. *Naval Command and Control*. 19 May 1995, proves this statement correct by codifying a combined naval arms approach to warfare throughout the entire range of military operations (ROMO).

independence had to be fought for and justified within living memory, the Air Force has always had an insecurity complex and been the most sensitive in defending or guarding its legitimacy as an independent institution.¹²⁸ Furthermore, although its fight for autonomy ended in 1947, it was not seen as a total victory by Airmen because the other services continued to maintain significant air capabilities. The Navy and Marine Corps retained control of their own aircraft, and the Army threatened encroachments as well.¹²⁹ Additionally, the Title 10 responsibilities granted to the Air Force implicitly authorizes aircraft “not otherwise assigned,” and therefore beyond Air Force control, permission to operate in its domain.¹³⁰

Of all the service encroachments, the one posed by the Navy troubles Air Force legitimacy the most because of the dangerous precedent it sets. Builder proffers that “if aviation in support of naval operations is controlled by the Navy, why should aviation in support of the Army not be controlled by the Army?”¹³¹ Anxiety also occurs in the Air Force when it comes to airpower’s “decisiveness.” For if “the Air Force is not a decisive and independent instrument of warfare, the reasons for having a separate aerospace service evaporates,” according to Builder.¹³² Builder is quick to point out that the Air Force has since broadened its purview beyond the strategic bombing mission that it first

¹²⁸ Builder, *The Masks of War*, 27.

¹²⁹ Thomas Hughes argues that Army encroachment into the Air Force’s domain was a problem the Air Force induced upon itself when it broke the 1947 Key West agreement to provide *adequate* close air support to the Army, a pre-condition the Air Force agreed to in exchange for a favorable Army endorsement of service independence. However, by 1949, the newly formed Tactical Air Command of the Air Force shrank away until it was nothing but a paper headquarters. When this occurred, the impetus was placed upon the Army to acquire its own aircraft, first planes and later helicopters to provide organic close air support the USAF could not provide. Hughes, *Over Lord*, 17.

¹³⁰ The Air Force’s Title 10 responsibilities are defined as: “In general, the Air Force includes aviation forces both combat and service not otherwise assigned. It shall be organized, trained, and equipped primarily for prompt and sustained offensive and defensive air operations. It is responsible for the preparation of the air forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Air Force to meet the needs of war.” *United States Code Title 10*, 2009 edition, Subtitle D, Chapter 807, Section 8062(c). Information derived from Cornell University Law School site located at:

http://www.law.cornell.edu/uscode/10 USC sec 10_00008062---000-.html (accessed 22 February 2010).

¹³¹ Builder, *The Masks of War*, 27.

¹³² When Builder makes this claim, he is referring to the post-World War II circumstances which led to the Air Force’s independence. Since “the doctrine and the decisiveness of strategic bombardment in future warfare were inextricably tied to the Army Air Force’s (AAF) case for autonomy, . . . if strategic bombardment could not be independently decisive in warfare, and if victory could only be obtained by having an army meet and defeat the enemy on the battlefield, then it would be difficult [to justify the case for Air Force independence].” Builder, *The Masks of War*, 28.

used to justify its autonomy.¹³³ Following the Vietnam War, it has placed a greater emphasis on tactical air warfare in direct support of the ground campaign.¹³⁴ Direct support missions, however, do not represent the independent air mission on which the legitimacy of the Air Force rests.¹³⁵ To deal with this issue, the Air Force, in much the same manner as the Navy, developed talking points to justify why the Air Force must remain independent.¹³⁶ The Air Force continues to promote the decisive, independent nature of airpower.¹³⁷ However, now recognizing that support of the ground troops and interdiction is the ultimate *dependent* end, the means to this end lie in successfully waging the *independent* air war, which will *always* remain the true business of the Air Force.¹³⁸ Using this rationale, the Air Force can justify its legitimacy, regardless of the dependent missions it is asked to perform.

While the Air Force is uncomfortable with its legitimacy, it is supremely confident about its relevance.¹³⁹ To the institution, the decisiveness of airpower as an instrument of war, whether wielded strategically or tactically, is an incontrovertible

¹³³ Builder, *The Masks of War*, 28.

¹³⁴ Direct support, as defined by Joint Doctrine, is “a mission requiring a force to support another specific force and authorizing it to answer directly to the supported force’s request for assistance.” When serving Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States*, 02 May 2007, (Incorporating Change 1 20 March 2009), IV-11.

¹³⁵ A direct support air mission in support of ground forces is not an independent mission due to the supported/supporting command relationship that exists between the ground and air components. In this scenario, the ground commander is the “supported commander” and the air commander is the “supporting commander.” As the supported commander, the ground commander plans the operation and directs the amount of assistance required from the supporting commander. The supporting air commander is responsible for developing a supporting plan that meets the supported ground commanders operational plan, and to provide whatever assistance required by the supported ground commander. Command relationship information obtained from: Joint Publication (JP) 3, *Joint Operations*, 17 September 2006, (Incorporating Change 1 13 February 2008), GL-26.

¹³⁶ This iterative, some would say compulsive, need for the Air Force to continually justify its existence continues to this day. Recently, a senior Air Force leader identified a requirement “for AF [Air Force] senior leaders to be able to powerfully but succinctly answer this question: ‘Why does the nation need an independent air force?’” To assist in this endeavor, a call went out to students from the School of Advanced Air and Space Power Studies to provide an “op-ed” piece to help answer this question. Timothy P. Schultz, Commander, School of Advanced Air and Space Power Studies, Maxwell AFB, AL, to the author, e-mail 18 December 2009.

¹³⁷ Colonel John A. Warden III, a former USAF officer and air power theorist, is arguably the most well known of these advocates. His theory argued that strategic attack air missions, conducted independently of ground operations, could win wars if airpower target selection followed the hierarchical levels of his “five rings” (Warden’s Rings). For a full accounting of his concepts, see: John A. Warden III, *The Air Campaign: Planning for Combat*, (Washington, DC: National Defense University Press, 1988).

¹³⁸ Builder, *The Masks of War*, 28.

¹³⁹ Builder, *The Masks of War*, 28.

fact.¹⁴⁰ But Builder implies that the Air Force may have inadvertently painted itself into a corner on this issue. Arguing that the “Air Force’s arguments for autonomy and legitimacy (the decisive, independent nature of airpower) are rooted in the same theory that gives it confidence about its relevance, the institution can never again question the grounds on which this theory is founded due to the vital institutional interests at stake.”¹⁴¹ To question the efficacy of such an underlying assumption would only result in an institutional identity crisis that would invariably weaken the organization and lower the Air Force’s reputation and influence within the DOD.

The next section will use Builder’s findings to develop an institutional identity (mask of war) for each service. The results will show that, while the Air Force and Navy are organizationally similar, they have much different identities due to the different historical experiences and traumas that each has endured.

Institutional Identity---The Mask of War Each Service Wears

Builder asserts that “the Navy, more than any of the other services and over anything else, is an *institution*. Supremely confident in its legitimacy, the Navy’s mask of war is marked by two strong senses of itself: its independence and its stature.”¹⁴² The Navy is so confident that it feels it can bear any burden and weather any storm. The Navy’s strong self-identity has its roots in a strong seafaring tradition that revolves around three elements: the man, the ship, and their common struggle against the sea.¹⁴³ Because the captain plays the pivotal, almost metaphysical role in ship performance and survival, tradition is the Navy’s altar of worship with independent command at sea being its Holy Grail. Accordingly, command at sea is held in high esteem and is actively sought by every naval line officer. Love for ships and the sea is the glue that binds the service together. This strong seafaring identification has led all Navy personnel to favor the institution over that of their community.

Because the Navy sees itself, first and foremost as an institution, it promotes a clearly defined unifying cause that accurately reflects national security objectives.

¹⁴⁰ Builder, *The Masks of War*, 28.

¹⁴¹ Builder argues that since Air Force legitimacy and relevance is founded both on the decisive *and* independent nature of airpower based on the theory of independent strategic operations (strategic bombardment/strategic attack), the Air Force can never again question *either* premise, no matter the circumstance. Builder, *The Masks of War*, 28.

¹⁴² Builder, *The Masks of War*, 31.

¹⁴³ Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” 99.

Furthermore, because the “means to the ends are the institution and its traditions, both of which provide for a permanence beyond the people who serve them,” the Navy actively supports the principle that every line officer is a potential candidate for CNO.¹⁴⁴ Accordingly, hierarchical distinctions disappear at the O-6 (captain) level which leads naval officers to see themselves as naval officers first and specialists second.

Because the Navy emphasizes loyalty to the institution above all else, its warfighting ethos reinforces this commitment by using the word “we” instead of “I.” This difference, though subtle, fosters a sense of cohesion and institutional teamwork by including both the listener and speaker in what is being said. “The US Navy Ethos” follows below:

- We are the United States Navy, our nation’s sea power—ready guardians of peace, victorious in war.
- We are professional sailors and civilians—a diverse and agile force exemplifying the highest standards of service to our nation, at home and abroad, at sea and ashore.
- Integrity is the foundation of our conduct; respect for others is fundamental to our character; decisive leadership is crucial to our success.
- We are a team, disciplined and well-prepared, committed to mission accomplishment. We do not waver in our dedication and accountability to our shipmates and families.
- We are patriots, forged by the Navy’s Core Values of Honor, Courage, and Commitment. In times of war and peace, our actions reflect our proud heritage and tradition.
- We defend our nation and prevail in the face of adversity with strength, determination, and dignity.
- We are the United States Navy!¹⁴⁵

Builder argues that “the Air Force, by contrast, identifies itself with flying and things that fly; the institution is secondary because it is a means to those things.”¹⁴⁶ Supremely confident in its relevance, the Air Force’s mask of war is “the embodiment of an idea, a concept of warfare, a strategy made possible and sustained by modern technology.”¹⁴⁷ Accordingly, the bond is not to the institution, but to the love of flying machines and flight.¹⁴⁸ The majesty of flight provides a metaphysical attraction to all

¹⁴⁴ Builder, *The Masks of War*, 32.

¹⁴⁵ US Navy Ethos obtained from United States Ethos website located at: http://www.navy.mil/features/ethos/navy_ethos2.html (accessed 22 February 2010).

¹⁴⁶ Builder, *The Masks of War*, 37.

¹⁴⁷ Builder, *The Masks of War*, 32.

¹⁴⁸ Builder, *The Masks of War*, 32.

people who join this service, and because the image of the lone pilot facing the risk of flight and combat has been sanctified since its inception, a sense of rugged individualism and elitism developed in the Air Force that resulted in a two-caste system of intra-service distinction: pilots and all others.¹⁴⁹ As the self-proclaimed standard-bearers of the warrior class, the pilot became the unquestioned leader of the service and the center point around which the entire culture revolved.¹⁵⁰ Nevertheless, not all pilots in the Air Force are equivalent. Because there always has to be a “first among equals” if the pilot-centric monarchic leadership structure is to work, the service inevitably gravitated toward an occupationally based tribalism.

The Air Force trend toward occupationalism undermines development of a lasting institutional identity since prideful association to a particular tribe overrides personal institutional loyalty.¹⁵¹ This fact, coupled with the monarchic leadership structure that favors the dominant tribe, has bred discontent among the remaining tribes. According to Builder, when leadership is only limited to the dominant pilot tribe, then even greater mischief will result, for such self-serving elitism sows the seeds of discontent among those whose contributions have been denigrated and who have been excluded from any hope of leadership. This lack of togetherness is further reflected in the “me” versus “we” tone inherent in “The Airman’s Creed” below:

I am an American Airman.
I am a warrior.
I have answered my nation's call.
I am an American Airman.
My mission is to fly, fight, and win.
I am faithful to a proud heritage,
 A tradition of honor,
 And a legacy of valor.
I am an American Airman,
Guardian of freedom and justice,
My nation's sword and shield,
 Its sentry and avenger.
I defend my country with my life.
I am an American Airman;
Wingman, leader, warrior.

¹⁴⁹ Builder, *The Masks of War*, 26.

¹⁵⁰ Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” 97.

¹⁵¹ Builder, *The Masks of War*, 23.

I will never leave an airman behind,
I will never falter,
And I will not fail.¹⁵²

The use of the pronoun “I” does not foster the sense of togetherness found in the Navy’s ethos. Thus, unlike the Navy which can weather any storm because the institution and its traditions provide permanence beyond the people who serve them, the Air Force is ill-equipped to handle institutional crises due to the lack of a unifying togetherness or cause. As a result, the Air Force has splintered into factions devoted to missiles, space, and the different types of airplanes. The net result of this division is a weak institutional identity devoted to disparate means instead of unifying ends.¹⁵³ This weak institutional identity was further destabilized when the Secretary of the Air Force Michael Wynne and Chief of Staff of the Air Force General T. Michael Moseley were dismissed in 2008. When the monarchic sub-culture leadership was deposed and replaced by a member of a lesser tribe, an identity crisis developed as the vision of the Air Force’s future role was cast into doubt.¹⁵⁴

The challenge now facing the Air Force is to devise a policy to reverse the deleterious effects this institutional identity crisis is having upon its institutional morale. This thesis will investigate this issue in subsequent chapters using Schein’s concepts of organizational culture and Builder’s decoding of cultural assumptions that form the basis of a military services institutional identity. Perhaps by understanding these important concepts, and using them to adjust the dysfunctional aspects of its culture, the Air Force can make the institutional transition from being a service that favors a single tribal sub-culture to becoming one that comprehensively incorporates its totality.

Summary

The purpose of this chapter has been to introduce Schein’s views on organizational culture and Builder’s determinants of institutional identity in military services. In doing so, we have learned that every organization’s institutional identity revolves around what is variously called its *essence* or the beliefs of the *corps* around its

¹⁵² USAF Airman’s Creed obtained from the official website of the USAF located at: <http://www.af.mil/shared/media/document/AFD-070418-013.pdf> (accessed 22 February 2010).

¹⁵³ Builder, *The Icarus Syndrome*, 35.

¹⁵⁴ Thomas P. Ehrhard, *An Air Force Strategy for the Long Haul*, (Washington, DC: Center for Strategic and Budgetary Assessments, 2009), 29.

*core.*¹⁵⁵ This essence is largely influenced by actions of the leadership elite responding to perceived changes in the external environment. Furthermore, by learning that organizational culture in mid-life stage institutions is slow to change due to embedded self-serving bureaucracies that obstruct change, one can see the critical role leadership plays in re-baselining cultural beliefs when assumed values and ideals cease to serve institutional interests. We have also seen the two options available to leadership to effect cultural change in mid-life stage organizations if dysfunctionality occurs.¹⁵⁶

This chapter also showed that “like all individuals and durable groups, the military services have acquired distinctive personalities shaped by past external experiences that affect their behavior.”¹⁵⁷ By capturing the essence of US service culture utilizing Builder’s schema, we are now able to understand why this behavior occurs and can look past the self-interested veneers needed to effect meaningful and lasting cultural change. For as this paper stated in the opening, in order for a military leader to be successful in changing an institution’s culture, he/she must first understand what military culture is and how it historically developed.

Historical experience has played a significant role in the Air Force’s cultural development. The next chapter will examine this issue by exploring its historical evolution from 1947 to the present. This exploration will provide a foundation for understanding how the Air Force arrived at the crossroads of the institutional identity crisis it now faces. Starting with independence gained, the following segment will chronicle the rise of the bomber generals, the rise of the fighter generals, and the fall of the fighter general T. Michael Moseley.

¹⁵⁵ Smith, *USAF Culture and Cohesion*, 2.

¹⁵⁶ The two options available to mid-life leaders are: systematically promote people from the organizational sub-culture not emotionally embedded to the original culture into power positions, and changing the composition of the dominant groups or coalitions in an organization by infusing outsiders into the leadership elite.

¹⁵⁷ Builder, *The Masks of War*, 7.

Chapter 2

The Evolution of Air Force Identity

Nothing is comprehensible, except through its history.

-- Pierre Teilhard de Chardin

Chardin's statement captures a key point of institutional identity. To understand how a service obtained its unique mask of war, one must first be aware of the historical experiences that influenced its development. This chapter presents a micro-history of the Air Force's institutional identity. It begins with an overview of how the service achieved its independence in 1947 and is followed by a brief examination of major historical events that gave rise to the monarchic rule of the bomber generals in the 1950s and 60s and of the fighter generals from the 1980s until 2008. This chapter concludes with the circumstances that led to the sacking of General T. Michael Moseley, which initiated the institutional turmoil the Air Force now faces.

Independence Gained

At the end of WW II, the United States Army Air Forces (USAAF) had grown into the premier airpower organization in the world, comprising 63,715 aircraft and 2,282,259 men.¹ Forged in the crucible of global warfare, the USAAF's tactical and strategic airpower played a significant role in the Allied victory over both Germany and Japan. Furthermore, the USAAF's position as America's only nuclear-capable delivery arm at the war's conclusion placed it in a unique position of strength to argue for its independence as a separate and co-equal military service. Be that as it may, the pathway to autonomy for the Air Force was far from guaranteed as WW II ended. Deep-seated Navy animosities instilled during the interwar period still remained that opposed Air Force independence.

Walter J. Boyne states that at the end of WW II, "there were two views on the need for an independent air force: those of the Navy and those of virtually everyone

¹ "The Air Force in Facts and Figures 2009 USAF Almanac" located at: http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509facts_fig.pdf.

else.”² There were practical as well as rhetorical reasons why the Navy opposed the creation of an independent Air Force. From a rhetorical standpoint, the Navy had never forgiven the Army’s air arm for Brigadier General William “Billy” Mitchell’s public accusations of irrelevance and incompetence directed against the Navy Department in the 1920s. From a practical standpoint, the Navy disagreed with the conclusions the USAAF derived from the US Strategic Bombing Survey (USSBS) Pacific War’s “Summary Report” when the report failed to describe the Navy’s anti-shipping campaign as being “decisive.” It instead gave that honor to the USAAF noting “that conventional strategic bombardment was the crucial factor in pushing Japan toward ultimate surrender.”³ This USAAF-Navy rift deepened when the USAAF’s General Orville Anderson wrote in his post-war report, “The Over-all Air Effort against Japan,” that airpower dominated both naval and ground forces in the Pacific.⁴ Feeling that the USAAF was deliberately attempting to discredit the Navy’s efforts and concept of warfare from 1921 to 1945, an all-out war developed between the services in the USAAF’s bid for post-war independence.⁵

Billy Mitchell and the Tradition of Radicalism

Billy Mitchell was an American general who served in France during the First World War and, by the conflict's end, commanded all American air combat units in that country. After the war, Mitchell returned to the US and was disappointed with the lack of strategic vision by both the War and Navy Departments in recognizing the intrinsic value of airpower. Convinced that the airplane was on the verge of becoming the decisive instrument of warfare, Mitchell ardently argued for an independent air service comprised of air-minded people who could develop and exploit the inherent flexibility of airpower for the national defense.

Entirely unprepared to move at a slow pace and convinced that military change only occurred after disaster in war or through public pressure, Mitchell began his single-

² Walter J. Boyne, *Beyond the Wild Blue: A History of the U.S. Air Force* (New York, NY: St. Martin’s Griffin, 1997), 32.

³ Tami Davis Biddle, *Rhetoric and Reality In Air Warfare : The Evolution of British and American Ideas About Strategic Bombing, 1914-1945* (Princeton, NJ: Princeton University Press, 2002), 278.

⁴ Biddle, *Rhetoric and Reality In Air Warfare*, 279.

⁵ Biddle, *Rhetoric and Reality In Air Warfare*, 279.

handed campaign for air service independence in the public domain.⁶ Disdainfully referring to the Army General Staff as the “long bowmen” who only saw airpower as a form of flying artillery to be used in direct support of the infantry, Mitchell assaulted the public with speeches, articles, books, and endless appearances before congressional committees.⁷ Although Mitchell advocated positions well beyond what the Army was prepared to sanction, he was careful not to directly target either his Army superiors or the role the Army played in the nation’s defense.⁸ Instead, Mitchell focused his wrath on publically discrediting the Navy’s budgetary domination and self-perceived omnipotence.⁹ Mitchell believed that the Navy’s role as the nation’s “first line of defense” was going to be wholly eroded by bomber aircraft in the near-future.¹⁰ Taking direct aim at the Navy in the public domain, Mitchell argued that airpower had now made naval vessels obsolete because they were incapable of surviving air attack by bomber aircraft.¹¹ Accordingly, Mitchell contended that only by possessing its own bomber fleet controlled by an independent air service would the US be able to maintain control of the sea and remain safe at home.¹²

Eventually, the public pressure which resulted from Mitchell’s campaign compelled the Navy in 1921 to agree to a series of tests by bombers on captured German warships.¹³ Eager to show the world what his bombers could do against a battleship, Mitchell ignored an Army-Navy agreement limiting him to six-hundred-pound bombs and instead used thousand-pounders to sink the “unsinkable” dreadnought, *Ostfriesland*.¹⁴ In what was perceived by his supporters to be a vindication of Mitchell’s views that naval vessels were now irrelevant, the Navy vociferously disagreed with this interpretation.¹⁵ Arguing that the *Ostfriesland* had been motionless and was not shooting back, the Navy

⁶ Biddle, *Rhetoric and Reality In Air Warfare*, 136.

⁷ Biddle, *Rhetoric and Reality In Air Warfare*, 136.

⁸ Biddle, *Rhetoric and Reality In Air Warfare*, 136.

⁹ Biddle, *Rhetoric and Reality In Air Warfare*, 136.

¹⁰ Biddle, *Rhetoric and Reality In Air Warfare*, 136.

¹¹ Eric Larrabee, *Commander in Chief: Franklin Delano Roosevelt, His Lieutenants, and Their War* (Annapolis, MD: Naval Institute Press, 2004), 166. For a full discussion of Mitchell’s viewpoints on why aircraft dominate sea craft, I encourage the reader to read pages 56-76 of William “Billy” Mitchell’s, *Winged Defense: The Development and Possibilities of Modern Air Power—Economic and Military* (1925; repr., Tuscaloosa, AL: The University of Alabama Press, 2009).

¹² Biddle, *Rhetoric and Reality In Air Warfare*, 136.

¹³ Larrabee, *Commander in Chief*, 167.

¹⁴ Larrabee, *Commander in Chief*, 167.

¹⁵ Larrabee, *Commander in Chief*, 167.

disputed the results of the test by contending that the absence of crew members on the ship to perform damage control functions was the sole reason why the *Ostfriesland* sank.¹⁶ No attempt was ever made to analyze the bomb hits to determine where the fatal damage occurred because the *Ostfriesland* sank in 100-fathoms of water, and inter-service disputes between the Navy and Mitchell's air service continued.¹⁷

To the dismay of many, including both supporters and skeptics of airpower alike, Mitchell went well beyond the theoretical preaching of the like-minded Italian air theorist Giulio Douhet following the sinking of the *Ostfriesland*.¹⁸ Perceived as a gadfly by Army leaders, and as "General of the Hot Air Force" by Navy leaders, Mitchell's acrimonious relationship between his Army superiors and the Navy only intensified as he attacked the bureaucracies he perceived as impeding the proper development of airpower.¹⁹ Convinced that he was involved in a life-or-death ideological struggle against non-air-minded people in both services, Mitchell plunged into a vituperative attack against both the Army's and Navy's obstructionism in national airpower development.²⁰ Using congressional hearings and articles in the *Saturday Evening Post* from 1923-25 to promote his position, Mitchell argued that a powerful air force could make a war briefer, more humane, and cheaper through obliteration of the enemy's

¹⁶ Larrabee, *Commander in Chief*, 167.

¹⁷ Larrabee, *Commander in Chief*, 167.

¹⁸ Carl H. Builder, *The Icarus Syndrome: The Role of Air Power in the Evolution and Fate of the U.S. Air Force*, (New Brunswick, NJ: Transaction Publishers, 1996), 53. Douhet was an Italian airpower theorist and a strong proponent of strategic bombardment in aerial warfare. To perform this mission, Douhet contended that only an air force independent from the constraints of the army and navy could succeed. In his book, *The Command of the Air*, Douhet argued that airpower was revolutionary because it operated in the third dimension and could fly over surface forces, relegating both ground and naval power to secondary importance. Since the vastness of the sky made defense almost impossible, the essence of air power was the offensive with the only defense being a good offense. To Douhet, the air force that could achieve command of the air by bombing the enemy air arm into extinction would gain command of the air and doom its enemy to constant bombardment. In essence, the air force able to take command of the air meant assured victory. Douhet believed in the morale effects of bombing in that strategic bombardment could break a people's will to resist by destroying, or threatening to destroy, a country's "vital centers." Armies became unnecessary because aircraft could overfly them and attack the centers of government, military, and industry with impunity. Targeting was central to Douhet's strategy and he believed that air commanders would always prevail if they chose the right mixture of targets to destroy the enemy's morale. These would vary from situation to situation, but Douhet identified the five basic target types as: industry, transport infrastructure, communications, government and "the will of the people." For a complete discussion of Douhet's theory, see Giulio Douhet's, *The Command of the Air*, trans. Dino Ferrari (Tuscaloosa, AL: The University of Alabama Press, 1998).

¹⁹ Biddle, *Rhetoric and Reality In Air Warfare*, 137.

²⁰ Builder, *The Icarus Syndrome*, 53.

industrial centers.²¹ However, by 1925, the Army had had enough with Mitchell's incessant public promotion of a new theory of warfare based on the independent operations of strategic bombers.²² In response to Mitchell's increasingly maverick behavior, the Army demoted him to colonel and assigned him to an obscure post in Texas.²³

This demotion only pushed Mitchell to use more radical rhetoric to convince Congress (and the public) of the need to form a Department of Aeronautics over the objections of both the Army and Navy.²⁴ Mitchell used the storm-related crash of the Navy dirigible *Shenandoah* and the loss of its 14 men as a pretext for issuing an inflammatory statement to the press indicting the War and Navy Departments on charges of "incompetency, criminal negligence, and almost treasonable administration" of aviation in support of the national defense.²⁵ The Army, not willing to let such egregious comments go unpunished, ordered Mitchell to Washington, DC to stand trial before a military court-martial for "conduct prejudicial to military discipline and of a nature to bring discredit upon the military service."²⁶ Found guilty in December 1925, Mitchell resigned from the Army in February 1926 rather than serve his sentence of a five-year suspension from active duty. Although Mitchell continued his crusade and remained an ardent champion of airpower in public circles until his death in 1936, his departure from the service greatly reduced his ability to influence military policy and public opinion.²⁷

The eventual realization of air service independence was largely determined by Airmen who shared much of Mitchell's vision, albeit with a more prudent temperament.²⁸ Two American military aviation pioneers and future general officers in the Air Force, Ira Eaker and Hap Arnold, drew important lessons on how not to pursue air service independence.²⁹ Both men learned that glamorous stunts and daring pronouncements were insufficient to achieve airpower's rightful recognition.³⁰ If they were to be

²¹ Biddle, *Rhetoric and Reality In Air Warfare*, 137.

²² Biddle, *Rhetoric and Reality In Air Warfare*, 136-137.

²³ Biddle, *Rhetoric and Reality In Air Warfare*, 137.

²⁴ Biddle, *Rhetoric and Reality In Air Warfare*, 137.

²⁵ Builder, *The Icarus Syndrome*, 53.

²⁶ Biddle, *Rhetoric and Reality In Air Warfare*, 138.

²⁷ Biddle, *Rhetoric and Reality In Air Warfare*, 138.

²⁸ Builder, *The Icarus Syndrome*, 53.

²⁹ Builder, *The Icarus Syndrome*, 53.

³⁰ Builder, *The Icarus Syndrome*, 84.

successful, they had to be patient and to work within the governmental bureaucracy until the political conditions were ripe to press again for service independence.³¹

The United States Army Air Corps Grows Wings

The status of the air service was one of the most frequently debated military topics in Washington in the 1920s and 30s. David Johnson describes this period as a time when “Army Airmen fought to establish air power as the decisive instrument and to gain their independence from what they considered to be a conservative Army hierarchy that was incapable of realizing the potential of air power as anything other than long range artillery relegated to supporting the ground effort.”³² Airmen employed six basic arguments for independence: military missions independent of surface forces existed for the air arm; the airplane has an almost unlimited potential as a weapon; the full potential of the airplane could be reached only by an air arm controlled by Airmen with knowledge and interest in aviation; the leadership of the Army lacked interest and knowledge in aviation and had subordinated the needs of the air arm to those of other combat arms; a separate air service would prevent expensive duplication by concentrating the government’s aviation activities under central control; and an independent air service had been successful in Britain.³³ The counter argument opponents used was that the air arm could not win wars by itself. Therefore, if aircraft were separated from direct control of the only service which *could* win wars by itself, the Army, its effectiveness would be reduced.³⁴

This issue was investigated repeatedly by several boards and commissions in the 1920s, most of which consisted of members opposed to changing the status quo.³⁵ One of the most important of these was the 1925 Morrow Board, charged with studying the best means of developing and applying aircraft in the national defense.³⁶ The conclusion reached by the Morrow Board in September 1925 was a political compromise between

³¹ Builder, *The Icarus Syndrome*, 53.

³² David E. Johnson, *Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War Era* (Santa Monica, CA: RAND Corporation, 2006), 9.

³³ James P. Tate, *The Army and its Air Corps: Army Policy toward Aviation, 1919-1941* (Maxwell Air Force Base, AL: Air University Press, 1998), 12.

³⁴ Tate, *The Army and its Air Corps*, 10.

³⁵ Biddle, *Rhetoric and Reality In Air Warfare*, 135.

³⁶ Earl R. McClendon, *The Question of Autonomy for the United States Air Arm, 1907-1945* (Maxwell Air Force Base, AL: Air University Press, 1954), 68.

the two countervailing viewpoints, recommending that the US Army's Air Service be renamed the US Army Air Corps (USAAC).³⁷ While this subtle name change may appear to be without substance, it was an important first step toward achieving air service independence. Recognition as a separate corps meant that although Army aviation's primary mission was to render direct support to the other Army branches, it was now also free to pursue independent missions.³⁸ Based on the recommendations of the Morrow Board, the "Air Corps Bill" became law on 2 July 1926 and established an additional Assistant Secretary of War for aeronautics and created a two-star Chief of the Air Corps on the General Staff.³⁹

A Paradigm is Born—The Birth of Daylight Strategic Precision Bombing

Despite the fact that certain privileges had been gained for Army aviation, the Air Corps Bill did not satisfy those who desired autonomy. But now that it could pursue missions independent of ground support, the Air Corps Tactical School (ACTS) began to train officers in such missions.⁴⁰ Operating under the ACTS motto, *Proficimus More Irretenti* (We progress unhindered by tradition), the underlying initial assumptions that would come to define the Air Force until 1982 were laid.⁴¹ The ACTS, which operated from 1926-1940, was the military professional development school for officers of the USAAC. At this school the doctrine of daylight precision bombing was born. This doctrine held that a campaign of daylight air attacks against critical targets of an enemy's industrial infrastructure using long-range bombers could defeat an enemy nation even if its army and navy remained intact. In formulating this doctrine, the ACTS rejected the politically unpalatable concept advocated by Douhet of attacking civilians.

In its first year of operation, the ACTS developed *Army Training Regulation 440-15* which advocated that pursuit aviation in a direct support role "to aid the ground forces in gaining decisive success" was the most important role of airpower.⁴² However, later that year, the ACTS modified this principle in the 1926 class text, *Employment of Combined Air Force*, asserting for the first time that airpower could strike at vital points

³⁷ Biddle, *Rhetoric and Reality In Air Warfare*, 138.

³⁸ McClendon, *The Question of Autonomy for the United States Air Arm*, 70.

³⁹ Biddle, *Rhetoric and Reality In Air Warfare*, 138.

⁴⁰ Biddle, *Rhetoric and Reality In Air Warfare*, 138.

⁴¹ Biddle, *Rhetoric and Reality In Air Warfare*, 138.

⁴² Biddle, *Rhetoric and Reality In Air Warfare*, 138.

deep inside the enemy's interior rather than merely targeting an enemy's military forces in a war of attrition.⁴³ This intellectual shift from the direct support of ground forces to independent missions would gradually evolve in the late 1920s and early 30s and become the dominant school of USAAC thought as WW II approached. During this period, "the rhetoric of ACTS evolved into a full and unconstrained articulation of the theory of independent strategic bombing," a theory that not even enemy pursuit aircraft could undermine.⁴⁴ This evolution of thought would ultimately lead to the "industrial web" theory evident in Air War Plans Division (AWPD) 1 and AWPD-42.⁴⁵ In both these plans, "attacks against the industrial and economic structure of Germany [by unescorted bombers] to break the capacity of the German nation to wage war" were outlined.

The shift in focus by the ACTS from pursuit aviation to strategic bombardment was the result of two factors: the offensive air war theories of the time and the quest for air service autonomy. The new ACTS doctrine of daylight precision bombing was the product of American Airmen's desire to prove that offensive strategic airpower could be decisive and secure victory without the need to use either ground or naval forces. To convert this doctrine into practice, two influential Airmen, Generals Frank Andrews and Hap Arnold, worked on acquiring the airplanes and organizing the USAAC infrastructure to make this paradigm of warfare a reality.⁴⁶

⁴³ Biddle, *Rhetoric and Reality In Air Warfare*, 139.

⁴⁴ Biddle, *Rhetoric and Reality In Air Warfare*, 156.

⁴⁵ Industrial web theory posits that once the main threads comprising the complex fabric of an industrial economy were determined, these critical centers of gravity could be systematically attacked by long-range offensive bombers that "will always get through." By destroying the enemy's economic ability to wage a lengthy war, industrial web supporters argued that the enemy's military ability and civilian morale to resist would collapse and force the enemy to either surrender or to seek terms at the bargaining table. For a full discussion of this concept, refer to Biddle's *Rhetoric and Reality In Air Warfare*, 163.

⁴⁶ In March 1935, General Frank Andrews was appointed by the US Army Chief of Staff Douglas MacArthur to command the General Headquarters (GHQ) Air Force which consolidated all the USAAC's tactical units under a single commander. A vocal proponent of the four-engine heavy bomber in general and the B-17 Flying Fortress in particular (as was MacArthur), General Andrews advocated the purchase of the B-17 in large numbers as the Army's standard bomber. However, MacArthur was replaced as Chief of Staff by General Malin Craig in October 1935 who opposed any mission or aircraft for the USAAC that did not directly support ground forces. Accordingly, the Army General Staff cut back on planned purchases of B-17s to procure smaller but cheaper twin-engine light and medium bombers. Andrews, feeling that Craig was incorrect, continued to promote the superiority of the B-17 and continually sought funding to increase the acquisition of additional B-17's. This was to have a negative repercussion on Andrews' career when Craig passed Andrews over for the position of Air Corps Chief and installed General Hap Arnold instead in September 1938. This was a fortuitous chance of fate for the Air Corps, for not only did Arnold continue Andrews' pre-war work to acquire additional four-engine bombers, Arnold's direct efforts ultimately resulted in the B-29 Superfortress. Builder, *The Icarus Syndrome*, 53, 76, 90.

Builder argues that the concept of precision bombardment was inextricably entwined with the principal ends of the Airmen—service autonomy only achievable through the successful wartime performance of big bombers in an independent role.⁴⁷ Accordingly, the ACTS maintained a narrow focus on the offensive role of airpower and minimized the strategic bomber’s vulnerability to interception by pursuit aircraft so as to not jeopardize the USAAC’s case for future autonomy.⁴⁸ This led, in turn, to the depreciation of not only defensive pursuit aircraft, but also ground support aircraft in general.⁴⁹ So obvious was this favoritism toward bombers that the USAAC sometimes referred to its pursuit units as “orphans.”⁵⁰ Because bombardment and autonomy were so inextricably bound together, an environment existed in the USAAC in which the questioning of bombardment by an Air Corps officer was both impolitic and unwise.⁵¹ In this atmosphere, the canonized underlying assumption of strategic bombardment was instilled within the organizational leadership of the “senior World War II generation” that would direct the United States Army Air Forces (USAAF) aerial campaigns in Europe and the Pacific.⁵²

Members of the senior World War II generation were long-time USAAC members who yearned to be separated from the Army. Accordingly, they wedded themselves to the theory of strategic bombing because it offered the only sure means of achieving service independence. Commissioned from 1907 to 1932, they were well-educated professional officers, with 94% having college degrees (82% graduated from the United States Military Academy at West Point) and 59% having attended advanced air studies at the ACTS prior to World War II.⁵³ These men, such as Generals Carl Spaatz, Hoyt Vandenberg, and Curtis LeMay, would command the USAAC (and later the USAAF) throughout the war and well into the formative years of independence.

⁴⁷ Builder, *The Icarus Syndrome*, 86.

⁴⁸ Perry McCoy Smith, *The Air Force Plans for Peace 1943-1945* (Baltimore, MD: Johns Hopkins University Press, 1970), 34, quoted in Builder, *The Icarus Syndrome*, 87.

⁴⁹ Smith, *The Air Force Plans for Peace 1943-1945*, 34, quoted in Builder, *The Icarus Syndrome*, 87.

⁵⁰ Biddle, *Rhetoric and Reality In Air Warfare*, 164.

⁵¹ Smith, *The Air Force Plans for Peace 1943-1945*, 34, quoted in Builder, *The Icarus Syndrome*, 87.

⁵² Worden defined the “senior World War II generation” as comprising those four-star Air Force Generals who were commissioned between 1926 and 1932. I have taken the liberty to modify the earlier date to 1907 to include the likes of Generals Arnold (1907) and Spaatz (1914). Mike Worden, *Rise of the Fighter Generals: The Problem of Air Force Leadership, 1945-1982*, (Maxwell Air Force Base, AL: Air University Press, 1998), 2.

⁵³ These numbers are derived from Worden’s, *Rise of the Fighter Generals*, 1-3.

The Adolescent Air Corps Becomes the USAAF

As involvement in WW II loomed on the horizon, the men who would command the USAAF were well indoctrinated in strategic bombardment's efficacy. However, before being able to lead men and aircraft in battle, the organization had to possess men and aircraft to lead. In direct response to the disturbing reports coming from the US Ambassador in Berlin about the size of the Luftwaffe and the production capacity of the German aircraft industry, the Congress in January 1939 authorized a significant increase in USAAC strength. The War Department initiated a program to increase the USAAC's aircraft strength from 2249 to 5,500 aircraft (144% increase), from 1689 to 3,203 officers (90% increase), and from 29,000 to 45,000 enlisted men (55% increase).⁵⁴ When war broke out in Europe in September 1939, the US declared its neutrality and concentrated its attention on developing the military strength to keep the Axis powers out of the Western hemisphere.⁵⁵ As USAAC military preparations intensified, there was little doubt among air planners about airpower's effectiveness after receiving reports that Poland had "died on its air fields."⁵⁶

As the USAAC rapidly expanded, it became obvious that the organizational command and control arrangement instituted on 1 March 1935 which divided the USAAC into two elements, the Air Corps and General Headquarters (GHQ) Air Force, was becoming unmanageable.⁵⁷ Further organizational friction within the air service also occurred because USAAC airfields fell under the direct control of Army Corps Area ground commanders. The combination of these mutually exclusive and competing chains of command significantly hampered the rapid mobilization and training efforts of the

⁵⁴ Tate, *The Army and its Air Corps*, 171.

⁵⁵ Biddle, *Rhetoric and Reality In Air Warfare*, 204.

⁵⁶ Tate, *The Army and its Air Corps*, 172.

⁵⁷ Tate, *The Army and its Air Corps*, 178. The separation of the USAAC into two separate components, the Air Corps and the GHQ Air Force occurred as a result of the 1934 Howell Commission appointed by President Roosevelt to investigate commercial aeronautics in the US. This commission recommended that a General Headquarters (GHQ) Air Force be created and comprise all air combat units and auxiliaries thereunto pertaining and be trained as a homogenous unit capable of operating either in close cooperation with the ground forces or independent thereof. Responsible for reporting to the US Army General Staff, the GHQ commander had jurisdiction over all matters relating to his component organization, maintaining and operating the technical equipment, unit training, and operational maneuvers. The Air Corps, however, controlled no aircraft and was only responsible for doctrine development, aircraft acquisition, and the training of all USAAC personnel. It would be not be an understatement to state that clear lines of authority were difficult to determine in this command and control (C2) structure. McClendon, *The Question of Autonomy for the United States Air Arm*, 92.

USAAC. To resolve this lack of unified command and effort, the USAAF was created on 20 June 1941 and placed under the control of a single commander.⁵⁸ Consisting of both the GHQ Air Force and Air Corps, the USAAF became a virtuously autonomous service, able to expand more efficiently because the organizational structure now existed to provide for the additional command echelons required for the rapidly increasing force.⁵⁹ Appointed as the USAAF's first Commanding General, General Hap Arnold reported directly to the Army Chief of Staff and was now responsible for establishing all policies and plans for Army aviation.⁶⁰ With the entry of the US into WW II on 7 December 1941, the only questions for advocates of an independent air force was whether daylight precision strategic bombardment would be able to live up to their pre-war predictions and obtain for them the service independence they desired.

The Reality of the USAAF's Performance in War—The US Navy's Perspective

The USAAF's air war in Europe began inauspiciously. As an equal partner with the British in the Combined Bomber Offensive (CBO) against Germany, the American Airmen made it clear from the start "that their interest was in selective attacks on German industry using high altitude precision daylight bombing."⁶¹ The British, due to the significant losses Bomber Command suffered early in the war when they attempted the same tactics the Americans were now proposing, urged the Americans to join them in a CBO waged at night.⁶² The USAAF, however, had no interests in changing their plans, even though much evidence existed from the British daylight experiences to indicate that the USAAF's approach was problematic.⁶³ Convinced that the B-17 was better suited for daytime operations and possessed better armor and firepower than British bombers, the USAAF leadership was determined to operate its own air forces in accordance with its own doctrine.⁶⁴

Although the early American raids performed reasonably well in the latter half of 1942 and suffered few losses, their good fortune was due in large part to the USAAF's leadership's desires to get the small force off to a good start by only attacking the fringe

⁵⁸ Tate, *The Army and its Air Corps*, 179.

⁵⁹ Tate, *The Army and its Air Corps*, 179.

⁶⁰ Biddle, *Rhetoric and Reality In Air Warfare*, 208.

⁶¹ Biddle, *Rhetoric and Reality In Air Warfare*, 209.

⁶² Biddle, *Rhetoric and Reality In Air Warfare*, 209.

⁶³ Biddle, *Rhetoric and Reality In Air Warfare*, 209.

⁶⁴ Biddle, *Rhetoric and Reality In Air Warfare*, 209.

of the European continent in good weather and with heavy fighter escort.⁶⁵ But, as the USAAF increased in size by the spring of 1943, General Ira Eaker, the commander of the Eighth Air Force responsible for the American portion of the CBO, was eager to prove the British naysayers wrong and turned his attention to industrial targets in the interior of the European mainland.⁶⁶ No longer under the continuous escort of Allied fighter aircraft, increasing numbers of US bombers fell to German fighters and anti-aircraft artillery.⁶⁷ The rapidly mounting losses culminated in the autumn of 1943 when the USAAF suffered operational losses between 6-8% *per raid* (one raid over Schweinfurt suffered 16% losses).⁶⁸ In fact, in four raids carried out over a six day period in October 1943, 148 bombers, each with a ten-man crew, failed to return.⁶⁹

The high losses suffered by the USAAF represented a significant repudiation of the pre-war theory taught at ACTS that a formation of self-defending bombers would prevail in a high altitude daylight attack. Despite General Arnold's best efforts at putting a positive light on these losses at press conferences when he argued that they were worth the results achieved, there was no avoiding the implications.⁷⁰ Steadily increasing German production, steadfast German morale, and almost catastrophic USAAF losses negated the belief that the war could be won solely from the air.⁷¹ This realization was bolstered further when President Roosevelt laconically noted that the USAAF could not afford to have sixty bombers shot down on a regular basis.⁷² USAAF leaders, recognizing that any hope of achieving post-war service independence was perilously close to defeat in the skies over Europe, changed tactics and delayed deep-interdiction

⁶⁵ Biddle, *Rhetoric and Reality In Air Warfare*, 209.

⁶⁶ Biddle, *Rhetoric and Reality In Air Warfare*, 223.

⁶⁷ Biddle, *Rhetoric and Reality In Air Warfare*, 223.

⁶⁸ Biddle, *Rhetoric and Reality In Air Warfare*, 224.

⁶⁹ Biddle, *Rhetoric and Reality In Air Warfare*, 224. According to the US Strategic Bombing Survey (USSBS): Statistical Appendix to Overall report (European War), over 79,000 USAAF aircrew were killed and 9,949 bombers lost in the CBO. Information derived from "The United States Strategic Bombing Survey: Statistical Appendix to Overall report (European War)," February 1947, located at: http://www.ussbs.com/stats-ovr-all_rpt-eur-ussbs-excerpts.pdf (accessed 24 March 2010). Furthermore, differing Allied air strategies (British area by night/US precision by day), overestimation of the bombing effects on enemy morale and production, and a seriously flawed net assessment of the strategic bombers vulnerabilities between 1940-44 also contributed to unnecessary losses. Biddle, *Rhetoric and Reality In Air Warfare*, p 274.

⁷⁰ Biddle, *Rhetoric and Reality In Air Warfare*, 224.

⁷¹ Biddle, *Rhetoric and Reality In Air Warfare*, 274.

⁷² Biddle, *Rhetoric and Reality In Air Warfare*, 225.

strikes until sufficient numbers of long-range fighter escorts were available.⁷³

Fortunately, such fighters were not long in coming because the simple technological advent of the external drop tank already existed. Although initially few in number, sufficient numbers of drop tanks had been produced by the winter of 1943-44 to begin long-range fighter escort operations. Once drop tanks were added to fighters, USAAF bomber losses dropped dramatically while German fighter losses steadily increased. Soon, the furious attritional battles between German and US fighters led to the Allies achieving air supremacy over France by mid-1944, making possible the cross channel invasion needed to end the war.⁷⁴

In the Pacific theater, the mid-1944 seizure of the Marianas provided the USAAF with another opportunity to prove the efficacy of its pre-war strategic bombardment theory. Minimizing the fact that ground and naval forces had been required to seize these advanced bases, bomber advocates promised that strategic bombardment could force Japan to surrender. The USAAF firebombed Japanese cities to destroy not only Japan's non-centralized, home-based war-making capacity, but also to weaken the morale of the civilian population.⁷⁵ Over the following months beginning in March 1945, General LeMay and his bomber force waged an area bombing campaign of terrible fury, attacking sixty-six Japanese cities with incendiary weapons.⁷⁶ For five flaming months, an air armada comprising a thousand USAAF bombers killed 260,000, injured 412,000, left

⁷³ "Following a tour of operational units in England in the spring of 1943, Assistant Secretary of War Robert Lovett realized the importance of escorts; he informed General Arnold of the "immediate need" for long-range fighters and "proper tanks"—not only for P-47's, but for the P-51's as well." Although the USAAF by 1942 already possessed a fighter (the two-engine Lockheed P-38) capable of escorting the bombers, the P-38 Lightning was available only in very limited numbers in Europe because operational demands prioritized deployment of the great majority of P-38's to the Pacific Theater of Operation because its twin engine design was deemed vital to long-range "over-water" operations. The P-47 Thunderbolt was also available in 1942, but without external drop tanks, it lacked sufficient range for escort duty. The introduction of the P-51B/C/D Mustang's changed all that. In general terms, the P-51B/C/D's possessed a reliable Merlin engine and had internal space for a huge fuel load. With external fuel tanks, it could accompany the bombers all the way to Germany. By the winter of 1943-44, sufficient fighters and external drop tanks were available to fulfill Lovett's demand, and shortly after bombers with a fighter escort began to regularly attack strategic targets deep within Germany. Biddle, *Rhetoric and Reality In Air Warfare*, 227.

⁷⁴ Biddle, *Rhetoric and Reality In Air Warfare*, 227.

⁷⁵ Biddle, *Rhetoric and Reality In Air Warfare*, 264, 278.

⁷⁶ Conrad C. Crane, *Bombs, Cities, and Civilians* (Lawrence, KS: University Press of Kansas, 1993), 127-129, quoted in Biddle, *Rhetoric and Reality In Air Warfare*, 268.

9,200,000 homeless, and burned down 2,210,000 houses.⁷⁷ Although leaving the Japanese population in an almost city-less land, strategic airpower again provided a contributory, but not decisive role. Instead, Japanese defeat would take a combination of arms from multiple services to complete.

Simply put, the Japanese populace (as had the German population) was able to overcome the effects of strategic bombing because their undying loyalty to the Emperor meant that they were prepared to work and fight for as long as physically able.⁷⁸ However, the dilemma created by the synergy of arms, including the naval strangulation of the Japanese economy prior to the great USAAF air raids of March 1945, eventually overwhelmed the Japanese ability to produce war material.⁷⁹ The deleterious effects of this Allied sea blockade, coupled with the rapid collapse of Japan's Kwantung Army under Soviet Union attack in Manchuria immediately following Hiroshima's bombing, and the August 1945 bombings of Hiroshima and Nagasaki, finally convinced the Emperor that Japan could not be defended.⁸⁰

The Third Child Finally Leaves Home—Air Force Independence Realized

Although events in both Europe and the Pacific had proven that airpower was not the solitary war-winner that the senior WW II generation had hoped to demonstrate at the war's outset, USAAF leaders still held hope that the European and Pacific United States Strategic Bombing Survey's (USSBS) would provide the evidence they needed to argue for service independence. In her book, *Rhetoric and Reality in Air Warfare*, Tami Davis Biddle describes the USAAF as an organization desperate to ensure that its own perspective on the war was widely publicized and suggests that the USAAF's leadership at the end of the war manipulated the focus and final wording of the USSBS report to ensure a favorable outcome.⁸¹ Conrad C. Crane disagrees with Biddle's suggestion that the USAAF was the only service that attempted to paint its service in a favorable light. Claiming that the USSBS was a "supposedly objective study of the accomplishments of strategic airpower during WW II conducted by scientists, economists, and military

⁷⁷ *The War Reports of General of the Army George C. Marshall, General of the Army H. H. Arnold, and Fleet Admiral Ernest J. King*, foreword by Walter Millis (Philadelphia, PA: Lippincott Press, 1947), 440, quoted in Biddle, *Rhetoric and Reality In Air Warfare*, 269.

⁷⁸ Biddle, *Rhetoric and Reality In Air Warfare*, 278.

⁷⁹ Biddle, *Rhetoric and Reality In Air Warfare*, 279.

⁸⁰ A. C. Grayling, *Among the Dead Cities* (New York, NY: Walker & Company, 2006), 114.

⁸¹ Biddle, *Rhetoric and Reality In Air Warfare*, 272.

representatives,” Conrad argues that “the reports were shaped by the individual biases of the writers and were more an advocacy of the positions of various division directors and military services than a balanced assessment of airpower’s decisiveness.”⁸² Because the USSBS was much like Carl von Clausewitz’s *On War* in that if you search deeply enough you can find substantiation for almost any position, it is difficult to fault the USAAF for its interpretation of the USSBS’s findings.⁸³

The final push for independence started well before the end of WW II when the Special Planning Division of the General Staff released a study suggesting that the absence of unity of command had hampered the prosecution of the war.⁸⁴ The solution recommended by the study to correct this problem was to create a single department of national defense to coordinate the various agencies of the nation’s armed forces.⁸⁵ In response to this suggestion, the Joint Chiefs of Staff (JCS) appointed a committee on 9 May 1944 to examine the future command structure of the US Armed Forces.⁸⁶ The committee was charged with examining three courses of action: maintain the status quo, create three separate departments (War, Navy, and Air), or create one single Department of Defense (DOD) under which all three services would have equal standing.⁸⁷ On 11 April 1945, the committee recommended to the JCS that a single DOD be created.⁸⁸

⁸² Conrad C. Crane, *American Airpower Strategy In Korea: 1950-1953* (Lawrence, KS: University Press of Kansas, 2000), 15.

⁸³ Crane, *American Airpower Strategy In Korea*, 15. *On War* is a book on war and military strategy by Prussian general Karl von Clausewitz, written mostly after the Napoleonic wars, between 1816 and 1830, and published posthumously by his wife in 1832. *On War* is a very long work and is quite difficult to read in its original German given the nature of its subject and the sophistication of Clausewitz’s approach. Widely translated from its original German into other languages for purposes of clarity, this clarity was achieved at the cost of oversimplifying and even distorting some important aspects of Clausewitz’s argument. The many translations of *On War* have magnified these problems by introducing new distortions along national and linguistic lines. These difficulties are compounded by the fact that *On War* is based on a set of unfinished drafts written over a long period of intellectual evolution. *On War* is actually an unfinished work; Clausewitz had set about revising his accumulated manuscripts in 1827, but did not live to finish the task. His wife eventually compiled his work, leaving out his later revisions, and finished the final two chapters either herself or with assistance from an unknown accomplice. For these reasons, the concepts Clausewitz put forth in *On War* are occasionally contradictory and have been diversely interpreted by various leaders, thinkers, armies, and peoples throughout history. For a full discussion of Clausewitz’s concepts, see Carl Von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976. Index 1984). This translation is widely considered to be the most readable, scholarly, and well researched version of Clausewitz’s life work.

⁸⁴ McClendon, *The Question of Autonomy for the United States Air Arm*, 131.

⁸⁵ McClendon, *The Question of Autonomy for the United States Air Arm*, 131.

⁸⁶ McClendon, *The Question of Autonomy for the United States Air Arm*, 132.

⁸⁷ McClendon, *The Question of Autonomy for the United States Air Arm*, 132.

⁸⁸ McClendon, *The Question of Autonomy for the United States Air Arm*, 135.

Addressing the subject of air force independence directly, the committee stated “that the statutory creation of a separate Air Force would merely give formal recognition to a situation which, having evolved through practical experience, really existed already in the form of the Army Air Forces.”⁸⁹

The Navy adamantly opposed this recommendation. It viewed a unified national DOD and an independent Air Force as political and budgetary threats. The Navy believed a unified command, with a single defense chief at the top, would block direct access of the Secretary of the Navy to the President.⁹⁰ The Navy also feared that an independent Air Force would compete not only for the limited budget that would be coming in the post-war years, but also for the traditional roles and missions that Billy Mitchell attempted to take from the Navy.⁹¹ What really concerned the Navy, however, was that it viewed an independent Air Force as a threat to its carriers and organic naval air arm. Now that WW II had proven the carrier to be the master of the sea, the Navy was not willing to risk losing control of it to the Air Force.

From 1945 through 1947, there were numerous special studies, committees, unification bills, and military service recommendations concerning DOD unification. The conclusions reached were drawn on political lines; those with naval sympathies were against unification while almost everyone else was for it.⁹² The Navy was going to lose a great deal of political independence if the departments were merged, and the issue of Air Force independence provided a convenient stumbling block to slow progress. Arguing that the US had just fought and won the greatest war in history, the Navy was satisfied with the contemporary military organization and urged that it not be changed. After all, why would Congress want to fix a machine that was not broken?⁹³

President Harry Truman became increasingly irritated as the political impasse continued. Viewing the Navy’s intransience as a failure to grasp the change that strategic airpower and nuclear weapons had wrought upon the world, Truman intervened decisively on 19 December 1945.⁹⁴ Ruling in the USAAF’s favor, Truman called for

⁸⁹ McClendon, *The Question of Autonomy for the United States Air Arm*, 136.

⁹⁰ Boyne, *Beyond the Wild Blue*, 32.

⁹¹ Boyne, *Beyond the Wild Blue*, 32.

⁹² Boyne, *Beyond the Wild Blue*, 32.

⁹³ Boyne, *Beyond the Wild Blue*, 32.

⁹⁴ McClendon, *The Question of Autonomy for the United States Air Arm*, 163.

congressional legislation combining the War and Navy Departments into a single DOD that included a coequal and independent Air Force.⁹⁵ Truman was clear on the need to create an independent Air Force when he stated, “Airpower has been developed to a point where its responsibilities are equal to both land and sea power, and its contribution to our strategic planning is as great. Parity for airpower can be achieved in one department or in three, but not in two. As between one department and three, the former is infinitely preferred.”⁹⁶

On 15 February 1946, General Carl Spaatz assumed command of the USAAF from Arnold.⁹⁷ With independence seemingly assured, Spaatz reorganized the USAAF to face the global challenges of the future.⁹⁸ This new structure, formally established on 21 March 1946, comprised three new functional operational organizations, the Strategic Air Command (SAC), the Tactical Air Command (TAC), and the Air Defense Command (ADC).⁹⁹ All three would serve as the combat force providers for the Air Force of the future. Furthermore, because bomber men had led the most powerful units of WW II, it would fall to them to lead the two largest organizations, SAC and the ADC.¹⁰⁰ TAC would be led by a fighter pilot.

In his book, *The Struggle for Air Force Independence*, Herman Wolk suggests that the creation of TAC was a tactic Air Force leadership used to convince the Army Chief of Staff, General of the Army Dwight D. Eisenhower, that the USAAF considered direct air support of the Army to be an important responsibility.¹⁰¹ Eisenhower had made it abundantly clear from the outset that he would endorse Air Force independence only after it created a TAC to support the battlefield needs of the ground combat element.¹⁰² The reason Eisenhower was so insistent on TAC’s creation was that he, like all Army

⁹⁵ Boyne, *Beyond the Wild Blue*, 33.

⁹⁶ Boyne, *Beyond the Wild Blue*, 33.

⁹⁷ Boyne, *Beyond the Wild Blue*, 29.

⁹⁸ Boyne, *Beyond the Wild Blue*, 29.

⁹⁹ Four support commands were also created: The Air Training Command, Air Materiel Command, Air Proving Ground Command, and Air Transport Command. Boyne, *Beyond the Wild Blue*, 29-30.

¹⁰⁰ Boyne, *Beyond the Wild Blue*, 29.

¹⁰¹ Herman S. Wolk, *The Struggle for Air Force Independence 1943-1947* (Washington, DC: Air Force History and Museums Program, 1997), 132.

¹⁰² Worden, *Rise of the Fighter Generals*, 30-31.

ground generals, believed that tactical air mission such as close air support (CAS) and battlefield interdiction (BI) had made significant contributions to victory in WWII.¹⁰³

To allay Army fears, the USAAF made an astute political decision in appointing Major General Elwood R. “Pete” Quesada to lead TAC. Quesada was a distinguished fighter commander with extensive combat experience leading the IX Fighter Command in the European theater.¹⁰⁴ More importantly, however, he was also highly respected by Army ground commanders.

In the European Theater, American ground-attack aircraft had inspired General Adolph Galland, commander of Germany’s fighter force, to say “the American fighter-bomber destroyed us.”¹⁰⁵ Most closely identified with supporting ground operations, Quesada saw the importance of airpower’s role in supporting ground operations and accepted the proposition that land power and airpower were equal and interdependent forces, neither of which was an auxiliary of the other.¹⁰⁶ Not wedded to the independent bombardment doctrine prevalent throughout much of the USAAF, he took great pains to institutionalize a mentality of ground support in his command.¹⁰⁷ General Omar Bradley appreciated his efforts and stated Quesada “has done more than anyone else to bring air and ground closer together.”¹⁰⁸ Viewing ground support as a new frontier awaiting exploration, Quesada developed dive-bombing and aerial interdiction techniques which paid tremendous dividends in the ground campaign.¹⁰⁹ His efforts were rewarded during the prelude to D-Day when IX Fighter Command aircraft validated his emphasis on air interdiction by destroying twelve bridges across the Seine River, seriously impeding German reinforcements being sent to Normandy.¹¹⁰ Reichsmarshall Hermann Goering

¹⁰³ Mark Clodfelter, *The Limits of Air Power: The American Bombing of North Vietnam* (Lincoln, NE: University of Nebraska Press, 2006), 11.

¹⁰⁴ For a complete of General Quesada’s accomplishments in the Second World War, I encourage the reader to read Thomas A. Hughes, *Over Lord: General Pete Quesada and the Triumph of Tactical Air Power in World War II*, (New York, NY: The Free Press, 1995).

¹⁰⁵ Hughes, *Over Lord*, 293.

¹⁰⁶ Hughes, *Over Lord*, 110.

¹⁰⁷ Hughes, *Over Lord*, 114.

¹⁰⁸ Hughes, *Over Lord*, 157.

¹⁰⁹ Hughes, *Over Lord*, 130.

¹¹⁰ Hughes, *Over Lord*, 131.

agreed and stated “these attacks hurt Germany’s defense of Normandy more than any other factor.”¹¹¹

As the campaign progressed, Quesada’s IX Fighter Command developed the intricacies of tactical air support so successfully that just weeks after D-Day, it was capable of routinely rendering effective CAS.¹¹² This CAS was needed when Quesada’s fighter-bombers were called upon in Operation COBRA, the Allied breakout attempt from the Norman hedgerows. Providing Allied armored-column cover and air-ground strikes of German positions, the efforts of IX Fighter Command wreaked havoc among the German defenses, helping to break the stalemate and propelling the Allies across Europe.¹¹³ The air-ground integration of the IX Fighter Command improved as the war progressed. Through the innovative use of radar for real-time control of fighter bombers and improved VHF communications and procedures between the air-ground team, friendly fire incidents fell while the speed and precision of close air support increased. These novel tactics paid tremendous dividends. By war’s end, Bradley confirmed the important role of tactical airpower in Western Europe when he concluded that tactical attacks were of more significant help to Allied armies than strategic attacks.¹¹⁴

With Army backing for Air Force independence assured following the creation of TAC, the only thing remaining was for the political process to play out in Washington. Nevertheless, “despite the ardent support of President Truman, the Navy’s opposition was too strong and legislation to implement his wishes fell short because of Navy opposition.”¹¹⁵ In a series of legislative standoffs, the Navy employed its political acumen and fought hard to maintain control of both its carriers and naval air arm.¹¹⁶ Eventually, with the political process hopelessly stalemated, it fell to Major General Lauris Norstad, Director of the Army General Staff’s Operation Division, and Vice Admiral Forrest P. Sherman, Deputy Chief of Naval Operations, to work out an agreement.¹¹⁷ In a compromise that left all parties dissatisfied, Sherman and Norstad

¹¹¹ Hughes, *Over Lord*, 131.

¹¹² Hughes, *Over Lord*, 162.

¹¹³ Hughes, *Over Lord*, 226.

¹¹⁴ General Omar N. Bradley, Military Advisor, USSBS, “Effect of Air Power on Military Operations (Western Europe),” 15 July 1945, 9-17, quoted in Biddle, *Rhetoric and Reality In Air Warfare*, 277.

¹¹⁵ Boyne, *Beyond the Wild Blue*, 33.

¹¹⁶ Boyne, *Beyond the Wild Blue*, 33.

¹¹⁷ Boyne, *Beyond the Wild Blue*, 33.

placed national interests ahead of service interests and provided the US Congress with a draft of the unification bill.¹¹⁸ “The House and Senate debated the bill from February to July 1947, with continued opposition by the Navy, but the National Security Act of 1947 finally became law on July 26.”¹¹⁹ President Truman fittingly signed the bill granting Air Force independence while sitting in the presidential aircraft, the *Sacred Cow*, at National Airport in Washington, DC.¹²⁰

The National Security Act of 1947, although now law, did not completely satisfy the three military departments. While a unified national DOD comprising the Departments of the Army, Navy, and Air Force was created, control of the national defense establishment’s airpower was not consolidated in one department as President Truman had desired. Instead, the compromise of allowing the Navy to maintain control of its carrier and land-based aviation opened the door for other services to argue that they too needed to maintain control of organic aviation each felt was essential to perform service missions. The result was that the Navy lost nothing in the National Security Act of 1947 because it maintained control of all of its aviation assets. The Navy also maintained control of the US Marine Corps (USMC) with its responsibility for conducting amphibious operations. The USMC, for its part, maintained control of its organic aviation arm. Even the Army was able to maintain its own observation, liaison, and intra-theater troop transport air arm.¹²¹

While the National Security Act of 1947 established the organization of the US Armed Forces, many differences remained concerning the specific roles of each branch. Eight months after the Act's passage, the service chiefs met with the new Secretary of Defense, James V. Forrestal (who ironically had argued against creation of the DOD when he was Secretary of the Navy), to work out their differences. Meeting at Key West, Florida from 11-14 March 1948, this conference produced a joint paper titled “Functions of the Armed Forces and the Joint Chiefs of Staff” that Forrestal issued on 21 April 1948.¹²² This paper, known as the Key West Agreement of 1948, served as the basis for

¹¹⁸ Boyne, *Beyond the Wild Blue*, 34.

¹¹⁹ Boyne, *Beyond the Wild Blue*, 34.

¹²⁰ Boyne, *Beyond the Wild Blue*, 34.

¹²¹ Boyne, *Beyond the Wild Blue*, 33.

¹²² Information derived from the US Department of Defense Secretary of Defense Biographies website located at: http://www.defense.gov/specials/secdef_histories/bios/forrestal.htm (accessed 26 March 2010).

defining the functional boundaries of each service.¹²³ The key points of the agreement were as follows:

- The Navy retained the Marine Corps (and the Corps' aviation arm for close air support), its own naval air arm to support sea battles, its own aircraft for air transportation, control of antisubmarine warfare, and the sealift support for the Army.
- The Army maintained responsibility for operations on land including ground-based air defense but gave up ownership of close air support as well as both strategic and tactical airlift and sealift.
- The Air Force gained responsibility for the Army's close air support, as well as strategic and tactical airlift, and maintained primary responsibility for strategic aerial warfare and defense of the US against air attack.¹²⁴

Although the agreement clarified the roles and missions of each service, what really emerged was an "un-unified" DOD with two armies (the Army and Marine Corps), two transportation forces (Air Force and Navy), and four air forces (Air Force, Navy, Marine Corps, and a soon-to-be sizeable Army helicopter force). Although the existence of these three other air forces would continue to challenge the need for continued Air Force autonomy in the coming years, these concerns were not a pressing priority at the end of WW II because the Air Force's strategic bombers were about to be designated as the primary provider of national defense and receive the majority of the defense budget. With this designation, the monarchic rule of the bomber generals and the decline of TAC was about to begin.

The Bomber Generals Solidify Their Control of the Air Force

After achieving independence, the Air Force's commitment to maintaining its autonomy by way of strategic bombing was reflected in the arrangement of its rank and force structure, organization and planning, and doctrine.¹²⁵ Air Force leaders were eager to prove that the service was now the keeper and wielder of *the* decisive instrument of war.¹²⁶ As the nation's only nuclear-capable delivery arm, the inclination to focus almost exclusively on strategic bombing led to the degradation of TAC. Although TAC's creation was intended to prevent the Army from possessing its own aircraft for ground

¹²³ Barry M. Blechman and William J. Lynn, eds., *Toward a More Effective Defense* (Cambridge, MA: Ballinger Publishing Company, 1985), 114.

¹²⁴ Stephen L. Reardon, *History of the Office of the Secretary of Defense, Volume I, The Formative Years* (Washington, DC: Office of the Secretary of Defense, 1984), 395-396.

¹²⁵ Worden, *Rise of the Fighter Generals*, 30.

¹²⁶ Builder, *The Masks of War*, 33.

support missions, Air Force senior leaders were never ardent advocates for tactical aviation because of the dependent, supporting role it played. Furthermore, when General Spaatz formed TAC in return for General Eisenhower's support, he adopted a bureaucratic command structure he knew would be short-lived because TAC's mission conflicted with the independent airpower operations that the Air Force planned to promote and develop.¹²⁷

The Air Force's leadership of the "senior World War II generation" came out of the war believing that strategic bombardment theory remained intact, despite considerable evidence that it was flawed and incomplete.¹²⁸ Added to this group of strategic bombing disciples were members of the "Junior World War II generation." Commissioned from 1932 to 1945, they had witnessed the rapid expansion and bloody attritional air warfare first-hand as front-line aircrews.¹²⁹ Not heavily involved in the decades-long struggle for independence, all were flyers who served mostly in bombers.¹³⁰ Furthermore, this generation was not as educated as the "senior World War II generation" because they were brought in during a time of rapid mobilization. Only 41% attended West Point, and more than a third were aviation cadets with no college degrees when they entered service.¹³¹ Even after the war, only 29% attended advanced air studies at the Air Command and Staff College (ACSC), which replaced ACTS in 1946.¹³² These bomber men were doers, not thinkers. They would assume the "bomber baron" title from the "senior World War II generation" and dominate senior Air Force leadership positions from mid-1965 to 1977 (see Figures 3 and 4 below).¹³³

¹²⁷ Builder, *The Icarus Syndrome*, 140.

¹²⁸ Builder, *The Icarus Syndrome*, 141.

¹²⁹ Worden, *Rise of the Fighter Generals*, 2.

¹³⁰ Worden, *Rise of the Fighter Generals*, 2.

¹³¹ Worden, *Rise of the Fighter Generals*, 2.

¹³² Worden, *Rise of the Fighter Generals*, 2.

¹³³ The term "bomber barons" refers to the bomber generals who dominated USAF senior leadership positions from 1947-1982. Worden, *Rise of the Fighter Generals*, 2.

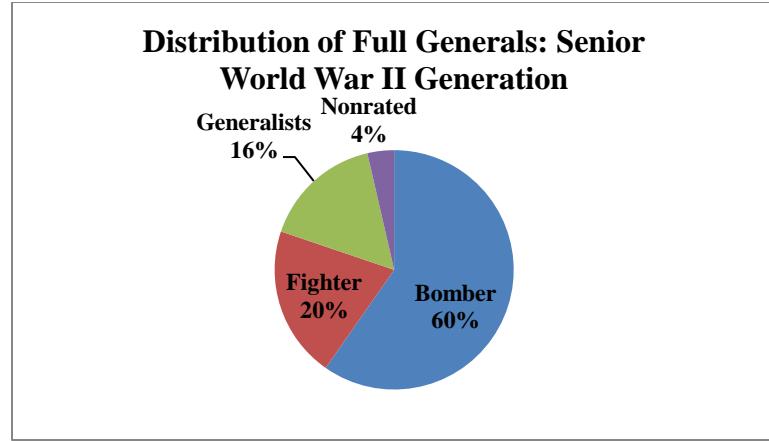


Figure 3. Distribution of Full Generals: Senior World War II Generation

Source: Worden, *Rise of the Fighter Generals*, 163.¹³⁴

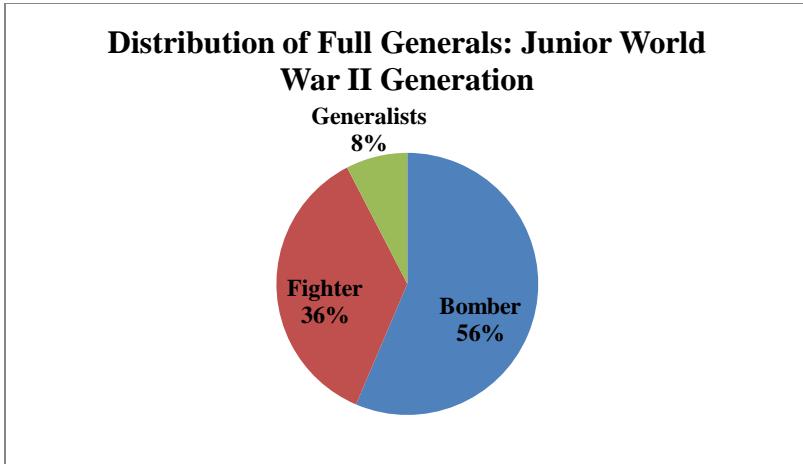


Figure 4. Distribution of Full Generals: Junior World War II Generation

Source: Worden, *Rise of the Fighter Generals*, 164.

Borrowing a concept from Morris Janowitz, Worden describes the bomber generals who controlled the Air Force from 1947 to 1982 as “absolutists” who clung to the belief that airpower could serve as an effective deterrent against all adversaries.¹³⁵ If

¹³⁴ In his study, Worden categorized a General based on that officer’s preponderance of experience in his formative years (first 15 years of service). If an individual flew both fighter and bomber aircraft in the formative years, Worden labeled him a “generalist.” Worden, *Rise of the Fighter Generals*, 18.

¹³⁵ Worden, *Rise of the Fighter Generals*, 44. Worden’s definitions are based on the Morris Janowitz concept of “absolutist” and “pragmatist,” although he admits he modified the definition (see note 76 on page 52). Janowitz bases his distinction on the differing professional opinions of massive versus gradual deterrence, not necessarily between fighter or bomber pilots. Janowitz does, however, describe the culture of SAC as favoring absolutism and claims “those who have had service with the fighter and ground support forces” will generally conform to the pragmatist school. “For the absolutist, limited wars, should they

deterrence were to fail, the absolutists believed that strategic airpower would still secure decisive victory for both conventional and nuclear conflicts. “Absolutism for these men was a natural product of the traditions of their romantic promises (decisiveness), their most destructive and singular means (strategic bombing), and their unconditional ends (total victory).”¹³⁶ Furthermore, the heavy focus on nuclear deterrence made it easier for absolutists to ignore the still poorly understood relationship between conventional bombing and enemy capitulation.¹³⁷ The result of this trend toward absolutism was that the Air Force’s senior leadership habitually oversold airpower’s capabilities and inflated the expectations among both policymakers and the public.¹³⁸

After securing the public’s and policymaker’s widespread acceptance of airpower deterrence as the primary basis for national security in the Cold War, strategic airpower advocates could secure the SAC forces needed to perform this role.¹³⁹ This did not bode well for TAC because it was viewed as a low priority whose budget ration could be trimmed when SAC needed more money.¹⁴⁰ Although Quesada fought hard for his share of the budgetary pie, he was disillusioned by what he saw. TAC was being ignored, while both funding and promotions were mainly going to SAC. In short, immediately after achieving its autonomy, the Air Force “funneled most of its research and development funds toward making bigger airplanes fly faster, higher, and farther at a time when many in the Army and few in the Air Force were calling for aircraft that flew slower, lower, and closer.”¹⁴¹

TAC’s demise came in the fall of 1948 when Quesada was called to Washington by the new Air Force Chief of Staff, General Hoyt Vandenberg.¹⁴² After being informed

occur, would represent a weakness in United States foreign policy.” For a complete discussion of Janowitz’s viewpoint, read Chapter 15 of Morris Janowitz’s, *The Professional Soldier: A Social and Political Portrait* (New York, NY: The Free Press of Glencoe, 1960), 303-20.

¹³⁶ Worden, *Rise of the Fighter Generals*, 44.

¹³⁷ Biddle, *Rhetoric and Reality In Air Warfare*, 293.

¹³⁸ Biddle, *Rhetoric and Reality In Air Warfare*, 293.

¹³⁹ Builder, *The Icarus Syndrome*, 145.

¹⁴⁰ Worden, *Rise of the Fighter Generals*, 39.

¹⁴¹ Joseph W. Caddell, “Orphan of Unification: The Development of United States Air Force Tactical Air Power Doctrine, 1945-1950” (PhD diss., Duke University, 1984), 303, quoted in Worden, *Rise of the Fighter Generals*, 37. Caddell also argues that this narrow focus on strategic bombing also hampered development of rocket/missile technologies, drones, transport, and fighter-bomber aircraft. Caddell, 306.

¹⁴² John Schlight, “Elwood R. Quesada: Tac Air Comes of Age,” in *Makers of the United States Air Force*, ed. John L. Frisbee (Washington, DC: Office of Air Force History, 1987), 202, quoted in Builder, *The Icarus Syndrome*, 140.

by Vandenberg that the Air Force's operational commands were going to be reorganized and that SAC was going to be strengthened while the TAC and ADC were to be reduced to headquarters elements and placed under the newly formed Continental Air Command (ConAC), Quesada objected.¹⁴³ Quesada reminded Vandenberg of the promise to Eisenhower that there would always be a tactical force to support the Army. But Vandenberg remained adamant and implemented his plan because he "viewed Quesada's attempts at maintaining TAC's organizational command as a sure pathway to future Air Force domination by the Army."¹⁴⁴ Quesada, personally offended by what he considered a violation of an Air Force commitment toward the Army, turned down Vandenberg's offer to head the ConAC and was assigned to relatively meaningless jobs until his retirement in 1951.¹⁴⁵

In December 1948, Vandenberg stripped TAC of its planes and pilots and reduced its status to that of a planning headquarters under the ConAC. With this action, the Air Force effectively broke its 1948 promise to provide close air support to the Army. It also made the bomber tribe the dominant Air Force community. These actions gave the Army the incentive to acquire its own aircraft, first planes and later helicopters to provide organic close air support the Air Force did not provide.¹⁴⁶

The apex of bomber domination came with the selection of General LeMay, the "king of the bomber barons," as Air Force Chief of Staff in 1961.¹⁴⁷ Among LeMay's first actions was to promote SAC people into key leadership positions.¹⁴⁸ "Within three months, LeMay had replaced the last of the fighter generals in senior leadership positions at United States Air Force Europe (USAFE) and TAC."¹⁴⁹ By 1 October 1961, all major operational commanders and the great majority of the Air Staff leadership were ardent bomber generals—most of them SAC absolutists.¹⁵⁰ SAC's methods had become the methods of the entire Air Force and were reflected in the SAC's versus TAC budget

¹⁴³ Schlight, "Elwood R. Quesada," 202, quoted in Builder, *The Icarus Syndrome*, 140.

¹⁴⁴ Schlight, "Elwood R. Quesada," 202, quoted in Builder, *The Icarus Syndrome*, 140.

¹⁴⁵ Schlight, "Elwood R. Quesada," 202, quoted in Builder, *The Icarus Syndrome*, 140.

¹⁴⁶ Hughes, *Over Lord*, 17.

¹⁴⁷ Worden, *Rise of the Fighter Generals*, 89.

¹⁴⁸ Worden, *Rise of the Fighter Generals*, 89.

¹⁴⁹ Worden, *Rise of the Fighter Generals*, 89.

¹⁵⁰ Worden, *Rise of the Fighter Generals*, 89.

allocation (Figure 5), numbers and distribution of pilots (Figure 6), and numbers and distribution of wings (Figure 7).

Both Peg Neuhauser and Gareth Morgan identify the budget process as the area in which most conflicts take place among organizational tribes. Because control of scarce resources is the primary source of political power in every organization, Morgan contends that the tribe able to control and allocate financial resources holds the key to power.¹⁵¹ Neuhauser contends that money speaks louder than words because people always pay much more attention to the budget message than to the organizational message.¹⁵² She also states that even if the organizational message is one of “cooperation, negotiation, and working together smoothly, once budgets are established which reinforce strict turf boundaries,” the message becomes mixed and organizational cohesion is lost.¹⁵³ This occurred in the Air Force as SAC got larger and TAC weakened during the height of the rule of the bomber generals. As indicated in Figure 5, even after

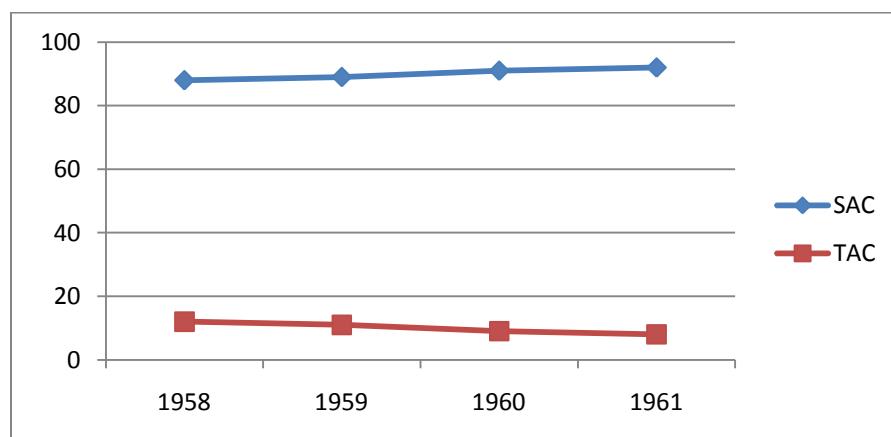


Figure 5. SAC versus TAC Percent of Operational Budget

Source: Worden, *Rise of the Fighter Generals*, 87.

the Korean War resulted in TAC’s reformation as a functional organizational command on 1 December 1950, SAC continued to receive the lion’s share of the budget from 1958-1961.¹⁵⁴ Despite the rhetorical assurances by the bomber barons that TAC was just as

¹⁵¹ Gareth Morgan, *Images of Organization* (Newbury Park, CA: SAGE Publications, Inc., 1986), 161.

¹⁵² Peg Neuhauser, *Tribal Warfare in Organizations*, (Cambridge, MA: Ballinger Publishing Company, 1988), 157.

¹⁵³ Neuhauser, *Tribal Warfare in Organizations*, 157.

¹⁵⁴ The reformation of TAC will be discussed in the following section.

important to the organization as SAC following the lessons learned during the Korean War, the reality was that TAC's continued existence was only meant to serve as an external demonstration of Air Force commitment to its sister services that it could "cover all the bases."¹⁵⁵ Actually, TAC remained a hollow force, receiving only one new production series of aircraft from 1955 to 1964 and shrinking in size from 41 wings in 1957 to 23 wings by 1960.¹⁵⁶

Despite assurances of TAC's importance, the acquisition priorities and doctrinal focus of the Air Force reflected the dominant group's underlying assumptions and forged the organization's institutional identity around the *essence* of SAC's beliefs of the *corps* around the Air Force's *core*.¹⁵⁷ Committed to strategic bombardment, LeMay characterized the Air Force's focus best when he said "that our only defense is a strategic striking power in being, of such size that it is capable of delivering a stronger blow than any of our potential enemies."¹⁵⁸ Air Force senior leaders, convinced that flying fighters was fun, but flying bombers was important, perpetually worked to maintain a strong SAC to serve as the deterrent force for President Eisenhower's massive retaliation defense strategy.¹⁵⁹ As the Air Force expanded to 137 wings in the mid-1950s, SAC bombers continued to receive top priority in both manpower and materiel.¹⁶⁰

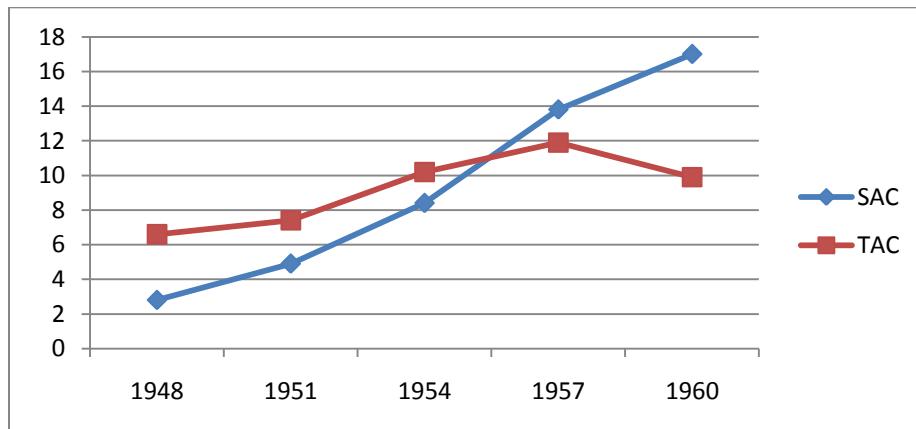


Figure 6. Number and Distribution of Pilots in thousands (1948-1960)

Source: Worden, *Rise of the Fighter Generals*, 88.

¹⁵⁵ Worden, *Rise of the Fighter Generals*, 78.

¹⁵⁶ Worden, *Rise of the Fighter Generals*, 85.

¹⁵⁷ James M. Smith, *USAF Culture and Cohesion: Building an Air and Space Force for the 21st Century* (USAF Academy, CO: USAF Institute for National Security Studies, 1998), 2.

¹⁵⁸ Wolk, *The Struggle for Air Force Independence 1943-1947*, 132.

¹⁵⁹ Wolk, *The Struggle for Air Force Independence 1943-1947*, 197.

¹⁶⁰ Worden, *Rise of the Fighter Generals*, 78.

Wherever the budget dollars of a military organization flow, the doctrinal focus is sure to follow. In every military service, doctrine is the encapsulation of what that service believes to be true regarding its method of conducting war. Describing the “fundamental principles by which the military forces … guide their actions in support of national objectives,” doctrine reflects the *espoused beliefs and values* of the dominant tribe and serves as basis for the deepest level of organization culture, *underlying assumptions*.¹⁶¹ Air Force doctrinal development and organizational culture during the reign of the bomber generals followed this trend.

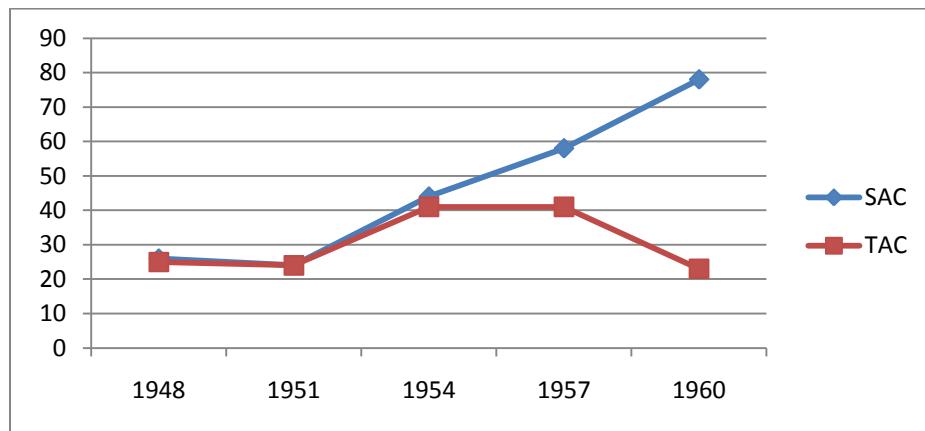


Figure 7. Number and Distribution of Air Force Wings (1948-1960)

Source: Worden, *Rise of the Fighter Generals*, 88.

The bomber barons of both the “senior World War II generation” and “junior World War II generation” came out of WW II believing strategic bombardment theory remained intact. Although the ability of conventional strategic bombing to force quick surrender proved to be incorrect, the deterrent threat of strategic bombing and the destructive capabilities of thermonuclear weapons gave the theory of strategic bombardment new life. Because the beliefs of the absolutist bomber barons coalesced nicely with President Eisenhower’s massive retaliation defense strategy, the chokehold on senior Air Force leadership positions by the bomber barons increased following the Korean War.

¹⁶¹ The definition of “doctrine” was derived from Joint Publication (JP) 1-02, *Department of Defense Dictionary of Military and Associated Terms*, 12 April 2001, (As Amended through 31 October 2009), 168. Schein, *Organizational Culture and Leadership*, 31.

When Eisenhower took office in 1953, he called for a thorough review of national strategy. The spread of Soviet communism, especially following the Soviet Union's detonation of a hydrogen bomb in 1953 and the launching of Sputnik in 1957, convinced Eisenhower that the Soviet Union still remained America's primary threat. To him, the concept of containment through massive nuclear retaliation seemed to be the best solution. Following the Korean War, Eisenhower desired a return to a limited defense budget and felt that strategic nuclear deterrence through massive retaliation was the most economical solution to achieve his goal. The New Look defense strategy that followed reflected Eisenhower's fiscal conservative principles and strongly favored the Air Force over the other services.¹⁶² As the cornerstone of the Eisenhower's defense policy, the Air Force got the largest budgetary share and the bomber barons continued to prioritize SAC's rapid expansion at the other organizational commands' expense.¹⁶³

The first Air Force doctrine following promulgation of the New Look was Air Force Manual (AFM) 1-2, *United States Air Force Basic Doctrine*, 1 April 1953. Revisions of this doctrine were later made on 1 April 1955 and 1 December 1959. These doctrinal publications only served to canonize strategic bombing. Despite two RAND studies following the Korean War that highlighted severe doctrinal Air Force shortcomings in its conduct of non-nuclear limited wars, senior leadership failed to incorporate the lessons learned into doctrine because that war was seen as an aberration that could never happen again.¹⁶⁴ Morris Janowitz captured the bomber barons' reluctance to effect necessary changes when he argued that "dogmatic doctrine is a typical organizational reflex reaction to future uncertainty."¹⁶⁵ The 1953 version continued to emphasize conventional strategic bombing as a war-winning capability and also stated that nuclear weapons were another means of conducting limited air warfare. The 1955 revision continued this evolution in thought by incorporating strategic nuclear

¹⁶² Lt Col Johnny R. Jones, *Development of Air Force Basic Doctrine, 1941-1992* (Maxwell Air Force Base, AL: Air University Press, 1997), 5.

¹⁶³ Crane, *American Airpower Strategy In Korea*, 173.

¹⁶⁴ Crane, *American Airpower Strategy In Korea*, 175. This critique by Crane is one that the USAF also leveled upon itself in 1984 Air Force Manual (AFM) 1-1 when it stated that "Both the 1953 version and its 1954 successor focused almost completely on the World War II experience, leaving out experiences learned in the Korean War." Air Force Manual (AFM) 1-1, *Basic Aerospace Doctrine of the United States Air Force*, 14 August 1984, A-3.

¹⁶⁵ Janowitz, *The Professional Soldier*, 24.

attacks on military installations and cities as the best means to destroy the adversary's will and capability to wage war.¹⁶⁶ The 1959 revision provided little significant change to the 1955 version, despite the recent impact of Sputnik and the rapid development of satellite and missile technology. Although doctrine writers substituted the term "aerospace" for "air forces" in recognition of the new domain, there was little substantive change to reflect the unique potential of either missile or space technologies. Obviously, the bomber barons felt that there was no need to stray from the WW II tenets of strategic bombardment.¹⁶⁷

The end of WW II placed nuclear-armed strategic bombers in the forefront of the national defense strategy. The effects of technological advancement, US governmental desires to reduce defense spending, and the start of the Cold War aligned to place SAC bombers at the pinnacle of the nation's massive nuclear retaliation policy. Because Air Force budgets from the late 1940s until the early 1960s maintained the strategic bomber in a position of preeminence to effect this policy, the bomber barons reigned supreme. In doing this, Air Force leaders not only hampered the development of tactical airpower, but also its performance in future wars through the underfunding of TAC. Ironically for the "bomber barons," it was to be during LeMay's tenure as Air Force Chief of Staff that the foundational conditions would be set for the fighter generals to wrest control away from the bomber tribe and assume control of the Air Force.

The Fighter Generals Take Control

Worden's *Rise of the Fighter Generals: The Problem of Air Force Leadership 1945-1982*, describes how senior leadership in the Air Force transitioned from the bomber community to the fighter pilots. In describing this transition, Worden argues that the absolutist mindset of the bomber barons poorly prepared them to handle the challenges of limited warfare. As the performance of the TAC continued to suffer in Korea and initially in Vietnam, the Air Force was forced to reexamine its underlying

¹⁶⁶ Jones, *Development of Air Force Basic Doctrine*, 6-7.

¹⁶⁷ Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, 1907-1960* (Maxwell Air Force Base, AL: Air University Press, 1989), 9.

assumption of strategic bombardment's primacy as "Korean" and "Vietnam Generation" pilots gained organizational influence.¹⁶⁸

It would have been difficult for the bomber baron leadership of the mid-1950s and early 60s to imagine that in less than twenty years the relevance of strategic bombing would again be questioned. These same men would be even more troubled to discover that the questioning would come not from without, but from within the organization by a small, but increasingly powerful cadre of officers that Worden classified as "pragmatists."¹⁶⁹ Pragmatists were pilots largely from the fighter community that served in both the Korean and Vietnam wars who viewed airpower in more non-absolute terms.¹⁷⁰ Because they had matured as officers in the era of limited conflicts, pragmatists were more inclined than absolutists to accept the Clausewitzian notion that war was nothing more than a political instrument.¹⁷¹ Accordingly, pragmatists were more accepting of the limitations that politics placed on war and realized that employing a

¹⁶⁸ The "Korean Generation" entered the service from 1945 through 1952, too late to participate in WWII, but fought as aircrews in the Korean War. Therefore, their formative combat experience occurred in the complexities of a limited war. This experience would be reinforced several years later as this generation rose to command units during the Vietnam War. Senior leaders from this generation were better educated than their predecessors, with more service schooling; 59% graduated from ACSC (as opposed to 38% for WWII generations) and 89% from one of the War Colleges (as opposed to 59% for WWII generations). They also followed broader career paths and would come to dominate leadership positions from 1978 to 1987. Worden, *Rise of the Fighter Generals*, 3. Although Worden did not continue to develop this concept of generations beyond the "Korean Generation," Major WM Bruce Danskine extrapolated USAF generational boundaries further and defined the "Vietnam Generation," "Post-Vietnam Generation," "Gulf War Generation," and the "New Order Generation" in his thesis "The Fall of The Fighter Generals: The Future of USAF Leadership" (Master's thesis, School of Advanced Airpower Studies, 2001), 33-39. According to Danskine, "the "Vietnam Generation" comprised officers commissioned from 1952 to 1970. Too young to fight in Korea, this generation's defining moment occurred when they faced combat during the Vietnam War. These officers dealt with the chaos of a limited, unconventional war and the realization that strategic bombing had little impact against an agrarian, non-industrial adversary. They learned that Korea had not been an aberration after all. These Airmen saw the futility of massive bomber attacks through a strong Integrated Air Defense System (IADS) against non-strategic targets and felt the frustration of not being able to gain lasting air superiority over the battlefield. These warfighting lessons could later be seen in the development of doctrine more focused on counterforce targets, and also in the AirLand Battle concept." This generation ran the USAF from 1988 until 2005. Danskine, "The Fall of The Fighter Generals: The Future of USAF Leadership," 33-34.

¹⁶⁹ Worden, *Rise of the Fighter Generals*, 45. Worden once again admits that this term "pragmatists" was borrowed from Janowitz, xi, 270-277, but Worden refined the definition (see note 80 on page 52). Janowitz opines that "those who have had service with the fighter and ground support forces" will generally conform to the pragmatist school." When differentiating between the two types, Janowitz limits his categorization to a select few USAF officers and classifies Curtis LeMay and Nathan Twining (as absolutists) and Elwood Quesada, Hoyt Vandenberg, Lauris Norstad, and Otto Weyland (as pragmatists). Janowitz, *The Professional Soldier*, 316-317.

¹⁷⁰ Worden, *Rise of the Fighter Generals*, 45.

¹⁷¹ Worden, *Rise of the Fighter Generals*, 45.

nuclear weapon was not always the answer when deterrence failed.¹⁷² Although both pragmatists and absolutists preferred to massively apply airpower whenever possible, only the pragmatists accepted the proposition that limited aggression could be met with limited response.¹⁷³ “In short, they accepted the political and military realities of war better, especially those present in a limited war.”¹⁷⁴

Worden claims that several factors led to the changing of the guard from the bomber barons to the fighter mafia. While the bomber barons were running the service, they overemphasized the SAC checklist mentality and discounted the importance of advanced education and innovative thinking.¹⁷⁵ Because fighter pilots were generally made more available to attend both professional military education and graduate schooling than bomber pilots, “the complexities of deterrence, détente, strategic sufficiency, limited war, and peacekeeping proved easier” for them to understand.¹⁷⁶ In sum, fighter pilots were intellectually better prepared to take a more pragmatic viewpoint and handled change better than their bomber pilot brethren.¹⁷⁷ This critical difference was reflected in the different, internal lessons each tribe derived from their Korean and Vietnam War experiences.

Worden also identified several external factors that led to the rise of the fighter mafia. The first was that strategic bombing did not deliver on the promises made by the bomber generals in either the Korean or Vietnam Wars. This loss of effectiveness, coupled with the fact that the tactical air forces had acquitted themselves reasonably well in those campaigns, led the Air Force in 1983 to accept a partnership role in the Army’s AirLand Battle concept outlined in Army Field Manual (FM) 100-5, *Operations*, 1 July 1976. This doctrine was developed because the Army realized that it could not win the land battle in Europe against significantly superior Soviet ground forces without Air Force tactical airpower.¹⁷⁸ Spurred by the need to fight outnumbered on the ground and

¹⁷² Worden, *Rise of the Fighter Generals*, 45.

¹⁷³ Worden, *Rise of the Fighter Generals*, 45.

¹⁷⁴ Worden, *Rise of the Fighter Generals*, 45.

¹⁷⁵ “SAC was particularly reluctant to send people to school” since the rapid expansion of SAC during the post-war era left little time for bomber pilots to attend civilian or professional military education programs. Fighter pilots, on the other hand, had more time to devote to educational pursuits. Worden, *Rise of the Fighter Generals*, 72-3.

¹⁷⁶ Worden, *Rise of the Fighter Generals*, 213.

¹⁷⁷ Worden, *Rise of the Fighter Generals*, 213.

¹⁷⁸ Worden, *Rise of the Fighter Generals*, 222.

win, the Army realized the crucial role that tactical airpower would play in evening the odds. Acceptance by the Air Force to support the AirLand Battle doctrine led to greatly improved Army/Air Force relations and to an organizational environment that eventually allowed fighter pilots to supplant the bomber pilot at the organizational tip of the spear.¹⁷⁹ This new organizational focus greatly increased demand for fighter and ground support aircraft and led to a reduction in strategic bombing programs. This ultimately culminated in the bomber being replaced as the primary nuclear deterrent force by the intercontinental ballistic missile (ICBM). In this new era of limited war, there was no place for the absolutist bomber generals of SAC.

This was a hard blow to take for an organization that had risen in the 1950s to the preeminent position within America's defense establishment. Nevertheless, it was LeMay himself who did the most to undermine Air Force credibility, and ultimately that of SAC, during his tenure as Air Force Chief of Staff. Although LeMay was an operational genius, his lack of political judgment did not play well in Washington.¹⁸⁰ LeMay's often-quoted suggestion that we could use nuclear weapons on the North Vietnamese to "bomb them into the Stone Age" is but one example. Furthermore, LeMay always remained fixated on the strategic and absolute, leading Secretary of Defense Robert McNamara to state that LeMay's viewpoints were "so parochial that he often acted contrary to the Air Force's own interests and the interests of the nation."¹⁸¹ This disagreement came to a head in May 1961 following the cancellation by McNamara of the B-70 Valkerie program over LeMay's strenuous objections.¹⁸² McNamara believed that the Air Force had enough bombers to last until 1967 and that ICBMs were a better choice for the nuclear deterrence mission because they "were faster, less

¹⁷⁹ Worden, *Rise of the Fighter Generals*, 222.

¹⁸⁰ Worden goes on to state that "most of the USAF generals who watched him in Washington admitted that he was a poor Chief of Staff." Worden, *Rise of the Fighter Generals*, 149.

¹⁸¹ Worden, *Rise of the Fighter Generals*, 112.

¹⁸² The B-70 Valkerie was the proposed replacement for the B-52 Stratofortress which entered USAF service in 1955. The B-70 was a Mach 3 high-altitude strategic bomber with the speed and range to make it virtually impossible to intercept by fighter aircraft. Procurement of the B-70, instead of ICBM's for the nuclear deterrence mission, reflected the absolutist's zeal to procure bomber aircraft that flew higher and faster. Worden, *Rise of the Fighter Generals*, 119.

vulnerable, easier to maintain and keep on alert, unstoppable, and—most importantly—cheaper.”¹⁸³

The decision to favor the ICBM over the B-70 did not please LeMay, and he continued to openly fight McNamara on principles and programs he considered essential for national security.¹⁸⁴ Accordingly, under LeMay’s leadership, TAC aircraft procurement and development remained a distant second to that of SAC. As America stepped closer to overt involvement in Vietnam, TAC remained anemic and was doctrinally ill-prepared for the conflict which lay ahead.¹⁸⁵ In fact, TAC would be forced to relearn the very same lessons it had derived from the Korean War due to the bomber barons’ singular focus on unlimited war via strategic bombardment.¹⁸⁶

Like Korea, the Vietnam War was a limited conflict that took place on a different part of the coercion spectrum than that of WW II. In WW II, the U.S. was committed to an unlimited war with clearly defined political objectives and military outcomes. The same cannot be said about the conflicts in Korea and Vietnam. Poor analysis, coupled with changing political objectives, caused the bomber barons to struggle to find acceptable and effective air strategies in these non-absolute wars. Eschewing tactical operations against the enemy’s forces in favor of strategic bombardment, airpower effectiveness suffered because Air Force leaders initially employed doctrinal target lists and tactics designed for unlimited war rather than tactics specifically developed for limited wars. Following America’s withdrawal from Vietnam, the Air Force again failed to incorporate the actual lessons of strategic bombardment’s effectiveness in limited wars

¹⁸³ Worden, *Rise of the Fighter Generals*, 120. For a detailed narration of the obstructionist maneuvers that SAC initiated to delay development of the ICBM, I encourage the reader to read Neil A. Sheehan’s, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon* (New York, NY: The Random House Publishing Group, 2009).

¹⁸⁴ Worden, *Rise of the Fighter Generals*, 147.

¹⁸⁵ The main reason why TAC was ill-prepared for Vietnam according to Crane is that the Air Force failed to doctrinally incorporate or equip the force following the lessons learned from the Korean War. Instead, in response to the growing threat to NATO by the Soviet Union, the bomber barons shifted TAC’s focus away from air-ground integration and attempted to transform it into a “mini-SAC” by procuring the century series aircraft ill-suited for close air support. Crane, *American Airpower Strategy in Korea*, 175.

¹⁸⁶ Forced to relearn how to fight a limited war, analysts of the early years of the air war noted that “not only were Korean War mistakes repeated, but new challenges resulted in new mistakes” because Air Force leaders continued to model strategies off of strategic bombardment theory. Crane, *American Airpower Strategy In Korea*, 178.

in its first post-war doctrinal revision because “most air chiefs thought political limitations prevented airpower from gaining victory.”¹⁸⁷

The first doctrinal revision following Vietnam, AFM 1-1, *Aerospace Doctrine, United States Air Force Basic Doctrine*, 15 January 1975, reflected the post-Vietnam national strategy of “realistic deterrence.”¹⁸⁸ Containing only 12 pages organized into three chapters, it was a dramatic reduction in size from previous versions. Yet, like its predecessors, it retained a heavy emphasis on nuclear operations.¹⁸⁹ While this manual stated that “Air Force Basic Doctrine is derived from knowledge gained through experience, study, analysis and test,” doctrine writers largely ignored Vietnam’s lessons and instead focused on the familiar issue of nuclear deterrence. Taking center stage in this manual was the strategic triad comprising the offensive nuclear force of manned bombers, ICBMs, and submarine-launched ballistic missiles (SLBMs). Although this was the first Air Force doctrine document to expound on ground support missions such as CAS and aerial interdiction (AI), there was nothing to indicate the conditions under which either were to be performed. It was quite obvious that the bomber barons clinging to power in the Air Force were unwilling to officially articulate the hard-learned CAS and AI experiences of its tactical air arm in Vietnam.

Despite the efforts of the bomber barons to maintain the doctrinal superiority of strategic bombardment, the die had been cast; the ascension of the fighter community into the monarchic leadership position of the Air Force became assured following Vietnam. As the strategic focus shifted to countering the conventional Soviet threat in Europe, the fighter-laden Korean Generation had slowly ascended into senior leadership positions and began to change the service’s underlying assumptions.¹⁹⁰ Beginning in the mid 1970s, the fighter generals had achieved relative parity with the bomber generals in the Air

¹⁸⁷ Clodfelter, *The Limits of Airpower*, 208.

¹⁸⁸ Remainder of this paragraph based on Air Force Manual (AFM) 1-1, *Aerospace Doctrine, United States Air Force*, 15 January 1975.

¹⁸⁹ Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, 1961-84* (Maxwell Air Force Base, AL: Air University Press, 1989), 725.

¹⁹⁰ This process occurred in much the same way as Schein detailed. To prevent cultural stagnation, leaders must systematically promote people from the organizational sub-culture not emotionally embedded to the original culture into leadership positions to enable the organization to better assess and respond to needed future directions. The only drawback to using this method, however, is that it is a time-consuming process, as evidenced by the twenty years it took for the Korean Generation to ascend to senior leadership positions. Schein, *Organizational Culture and Leadership*, 303.

Force power structure.¹⁹¹ This initiated a decade of transition during which the fighter generals had the power to debate the future role of the Air Force on a more-or-less equal footing with the bomber generals. The internal discussion revolved around the Army's concept of "AirLand Battle." Although this debate raged for seven years, "the selection of fighter Korean War cohort General Charles A. Gabriel as Air Force Chief of Staff in 1982 capped the [fighter tribes] ascendancy" and settled the issue.¹⁹² Agreeing to conduct joint tactical training and field exercises based upon the AirLand Battle concept, Gabriel signed a memorandum of understanding (MOU) with the Army Chief of Staff in April 1983.¹⁹³ Although AirLand Battle was never officially included in Air Force doctrine, the MOU did succeed in identifying doctrinal differences in air-ground integration between the Air Force and Army during joint operational exercises.¹⁹⁴ More importantly, however, the AirLand Battle's concept of using CAS and AI in direct support of the ground forces marked a return to the priorities of Quesada in WWII.

Following Gabriel's appointment as Air Force Chief of Staff, there were no bomber generals left in key Air Staff positions, and the fighter generals now outnumbered bomber generals in the major commands by five-to-four.¹⁹⁵ The influence of this newly ascendant tribe could also be seen in the Air Force's budgetary priorities. The procurement of fighters rapidly increased as the service now "sought airpower decisiveness through ground cooperation."¹⁹⁶ General Merrill A. McPeak, the Air Force Chief of Staff from 1990 to 1994, completed the purging of the bomber tribe's influence by instituting a number of policies to ensure that the corporate takeover of the fighter

¹⁹¹ Thomas P. Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services: A Comparative Study of Weapons System Innovation" (PhD diss., Johns Hopkins University, 2000), 89. Worden provides data to support Ehrhard's assertion. In 1975, bomber generals only outnumbered fighter generals by two to one, and in the major (four-star) commands by four to three. This ratio was well below the bomber general's heyday of the 1960s when it was five to one and seven to one, respectively. Worden, *Rise of the Fighter Generals*, 226.

¹⁹² Worden, *Rise of the Fighter Generals*, 226.

¹⁹³ A memorandum of understanding (MOU) on Joint Army/USAF Efforts for Enhancement of Joint Employment of the AirLand Battle doctrine was signed on 21 April 1983. On 22 May 1984, the two service chiefs signed a memorandum of agreement (MOA) on Army—Air Force development process. The MOA addressed broad war-fighting issues and identified 31 initiatives to enhance the potential of the Army/Air Force's war-fighting posture and to positively impact the way future combat operations were conducted. Thomas A. Cardwell, III, *AirLand Combat: An Organization for Joint Warfare* (Maxwell Air Force Base, AL: Air University Press, 1992), 71.

¹⁹⁴ Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, 1961-84*, 546.

¹⁹⁵ Worden, *Rise of the Fighter Generals*, 226.

¹⁹⁶ Worden, *Rise of the Fighter Generals*, 228.

tribe would remain in place.¹⁹⁷ By disbanding SAC and placing bomber units under the control of the fighter-dominated Air Combat Command (ACC) following the dissolution of the Soviet Union at the end of the Cold War, McPeak set the conditions for the fighter tribe to maintain its monarchic rule.¹⁹⁸ The only questions remaining to be answered was how long this reign would last, and whether the doctrinal airpower emphasis of the fighter pilots was going to perform better than that of the previous regime.

The Fighter Generals Fall From Grace

In the years between Vietnam and the late-1980s, the Air Force significantly altered its concept of airpower as a result of the profound changes in technology.¹⁹⁹ Although AFM 1-1, *Basic Aerospace Doctrine of the United States Air Force* (14 August 1984) was the first doctrinal statement published after Gabriel became Air Force Chief of Staff, it still reflected ACTS theories of strategic bombing and did not reflect the underlying assumptions of the fighter mafia.²⁰⁰ In fact, intense debates were taking place within the service that would delay publication of the new manual until 1992. The 1984 version of AFM 1-1 and the doctrinal debates that followed marked the beginning of a change in Air Force doctrine.²⁰¹ The version published after the First Gulf War was to focus on the warfighting functions of airpower rather than on deterrence.²⁰² The ascendancy of the fighter tribe called the old paradigms of the bomber tribe into question. The experiences of both Korea and Vietnam highlighted the importance of tactical general-purpose forces. Although not officially endorsed in doctrine, much of the tactical Air Force began following the AirLand Battle concept in 1984 following Gabriel's signing of the memorandum of agreement with the Army. Other fighter mafia officers were headed in another direction, however. In 1986, Air Force Colonel John Warden published his book *The Air Campaign*, which proposed that airpower should

¹⁹⁷ Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services," 90.

¹⁹⁸ Ehrhard, "Unmanned Aerial Vehicles in the United States Armed Services," 90.

¹⁹⁹ It was also during this time immediately following Vietnam when the USAF Fighter Weapons School introduced an 'aggressor' training squadron; air combat training at the Tactical Fighter Weapons Center was aggressively revamped, and new generation fighters such as the F-15 and F-16 were purchased. Richard P. Hallion, *Storm over Iraq: Air Power and the Gulf War* (Washington, DC: Smithsonian Institution Press, 1992), 27, 31.

²⁰⁰ The term "fighter mafia" refers to the fighter generals who dominate USAF senior leadership positions to this day.

²⁰¹ Jones, *Development of Air Force Basic Doctrine*, 35.

²⁰² Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, 1961-84*, 744.

return to its underlying assumption of focusing on the enemy's strategic centers of gravity.²⁰³ Seeking to revisit the long-held belief that airpower could function independently and achieve decisive victory without the use of ground forces, Warden advocated an “inside-out” theater-wide air campaign utilizing his Five Rings theory (Figure 8). In his theory, Warden contended that victory could be achieved by attacking an enemy’s leadership ring first. If unable to force capitulation after attacking the inner ring, Warden recommend attacking, in ascending order of importance, each subsequent ring until attack of the enemy ground forces became the last option remaining.²⁰⁴ In effect, Warden was advocating a return to the strategic bombing theories advocated by ACTS in the late 1930s, albeit employing new instruments.

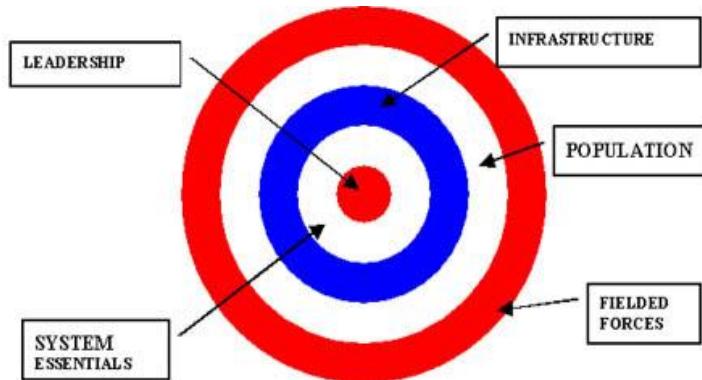


Figure 8. Warden’s Five Rings

*Source: Warden, *The Enemy As A System**

This intellectual targeting debate would be highlighted in 1990 during the First Gulf War and would place the issue of airpower’s decisiveness back in the forefront of Air Force advocacy for the next decade. Although the 1984 version of Air Force doctrine still called for conducting strategic attacks on the enemy’s warfighting potential, General Charles Horner, the air component commander, was an adherent of the AirLand Battle

²⁰³ Col John A. Warden, III, *The Air Campaign: Planning for Combat* (Washington, DC: National Defense University Press, 1988).

²⁰⁴ The “leadership ring” controls the system or state, (the state’s leaders); the “system essential ring” provides or represents key production that is critical for state survival, (oil, electricity, food and money); the “infrastructure ring” ties the entire system together, (transportation); (4) the “population ring” is composed of the state’s civilian population; and the “fielded forces ring” are the military forces that defend the state from attack.

concept. Therefore, he intended to target not the strategic centers of the Iraqi state but its fielded military forces to facilitate the planned Army ground combat element's scheme of maneuver. But, a targeting dilemma occurred when coalition airpower operations began because Iraqis were entrenched and did not conduct the mobile operations the Soviet-oriented AirLand Battle strategy assumed would transpire. Therefore, the AirLand Battle concept of attacking the follow-on second and third echelon forces of Iraq would not have produced the shaping results Horner expected. Thus, Horner was essentially compelled to follow Warden's proposed targeting scheme in Phase 1 of the air campaign. But as the anticipated coalition ground offensive grew near, Phases 2 and 3 of the air campaign more closely reflected the AirLand Battle concept.²⁰⁵ In the end, Horner never had to make a determination between either Warden's tenets or the AirLand Battle concept due to the abundance of airpower available to him. Therefore, elements of both concepts were interwoven throughout the air campaign, culminating in a victory achieved after only a 100-hour ground war.

The rapid defeat of the 500,000-plus Iraqi Army and the loss of fewer than 200 American servicemen in the ground campaign ignited an Air Force celebration of airpower. McPeak was quoted as saying "the war against Iraq marked the first time in history that a field army had been defeated by airpower."²⁰⁶ Airpower advocates, from both within and without the Air Force, started suggesting that airpower, armed with precision-guided munitions, had proven that a new paradigm of warfare had arrived.²⁰⁷ Although most proponents stopped short of suggesting that airpower had achieved victory by itself, they all agreed that airpower had achieved the most extensive and successful preparation of the battlefield in history.²⁰⁸ There was no doubt among the fighter mafia that the Gulf War, and the subsequent Kosovo War in 1999, proved that

²⁰⁵ The Air Campaign was comprised on three Phases. Phase 1 was the shortest of these and established control of the air space above Iraq and Kuwait by eliminating the enemy's IADS and air forces. This phase also include the bombing of selected civilian and leadership command posts. Phase 2 was designed to incapacitate the Iraqi military, as well as the country's military and civilian infrastructure through the bombing of weapon depots, power plants, communication lines, and water treatment plants. Phase 3 consisted of CAS and AI missions in support of the ground combat element during the ground invasion.

²⁰⁶ Fred Kaplan, "General Credits Air Force for the Iraqi Army's Rapid Defeat," *The Boston Globe*, 16 March 1991, <http://www.encyclopedia.com/doc/1P2-7651619.html> (accessed 21 March 2010).

²⁰⁷ John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Dulles, VA: Potomac Books Inc, 2007), 229.

²⁰⁸ Boyne, *Beyond the Wild Blue*, 318.

independent application of tactical airpower had now become decisive in modern warfare.²⁰⁹ This belief was reflected in the next three Air Force basic doctrinal manuals.

AFM 1-1, *Basic Aerospace Doctrine of the United States Air Force*, March 1992, was the first to express the viewpoints of the fighter mafia.²¹⁰ The central theme of Air Force airpower was no longer centered on nuclear confrontation or deterrence. Instead, this doctrine focused substantially on conventional war. This document also was the first to introduce the Tenets of Airpower.²¹¹ Discussions on both the operational level of war and air campaign were also added. Confident in its new capability, the Air Force's new airpower doctrine eschewed a reactive conventional ground-combat capability in favor of proactive employment of conventional air forces to handle the nation's conflicts. This proclivity was further manifested in the 1992 white paper, *Global Reach—Global Power: The Evolving Air Force Contribution to National Security*, which advocated conventional long-range airpower projection and precision bombing to counter regional threats.²¹² The fundamental premises of the 1992 doctrinal manual were reflected in the ensuing manuals of 1997 and 2003, leading the Air Force to remain focused on procuring highly capable technologies to conduct the decisive airpower operations codified in doctrine.

James Smith concurs with this assessment. "Whatever its purpose and genesis, the precision, decisive airpower employed by the Air Force in the First Gulf War . . .

²⁰⁹ "The Kosovo War began on March 24, 1999 when NATO began air strikes on the Federal Republic of Yugoslavia. This military campaign known as Operation Allied Force, used air strikes to force President Milosevic to stop the ethnic cleansing he ordered in Kosovo. NATO leaders agreed to a 2-day air strike, convinced that Milosevic would comply just as he had in Bosnia four years earlier. When Milosevic refused, the air campaign was gradually escalated into an around-the-clock operation. Seventy-eight days later, on June 3, 1999 Milosevic finally surrendered to NATO demands. At the end of the war, air power advocates came out in force, claiming that Operation Allied Force fulfilled the prophecies of Giulio Douhet. These claims were not new; what was different, however, was that the people doing the advocating were not wearing Air Force uniforms. For example, President Clinton said Allied Force proved "that a sustained air campaign, under the right conditions, can stop an army on the ground." Colonel Anthony L. Hinzen, "Kosovo: The Limits of Airpower II," *Air and Space Power Journal—Chronicle Online Journal*, 16 May 2002: <http://www.airpower.maxwell.af.mil/airchronicles/cc/hinen.html> (accessed 22 March 2010).

²¹⁰ Remainder of this paragraph based on Air Force Manual (AFM) 1-1, *Basic Aerospace Doctrine of the United States Air Force*, March 1992.

²¹¹ Seven tenets were listed that focused on the unique aerospace environment and the capabilities of aerospace forces. These tenets are: centralized control and decentralized execution, flexibility and versatility, priority, synergy, balance, concentration, and persistence. AFM 1-1, *Basic Aerospace Doctrine of the United States Air Force*, vol. 1, March 1992, 8.

²¹² Peter D. Feaver and Kurt M. Campbell, "Rethinking Key West: Service Roles and Missions After the Cold War," in Joseph Kruzel, ed., *1993 American Defense Annual* (New York, NY: Lexington Books, 1993), 166-168, quoted in Smith, *USAF Culture and Cohesion*, 14.

helped it to develop a clear vision of its future. While the other services struggled to define themselves, the Air Force was secure in its vision and continued to push for faster, higher, and stealthier” technologies to serve as “the decisive airpower instruments of future war.”²¹³ Sanu Kainikara agrees that the Air Force experienced a paradigm shift in air warfare when he stated that “for the first time in the history of air warfare, the air campaign of the 1991 Gulf War displayed the almost perfect model for the employment of airpower. This classic demonstration of airpower’s merits changed the way in which it was perceived and brought to center-stage the claims by airpower zealots that airpower could win a war on its own.”²¹⁴ The Kosovo War bolstered the fighter mafia’s belief in airpower’s decisiveness. In a span of less than two decades following the MOA for the AirLand Battle concept, the Air Force began to back away from dependent ground support missions and began to pursue the independent role of strategic attack in the national defense establishment. Arguing that strategic attack could win wars at a much lower cost in friendly casualties and national military commitment, the fighter mafia began to ardently pursue the high-end technological equipment needed to perform this purpose.

Ironically, this relentless pursuit of high-end technologies by the fighter mafia would ultimately lead to General T. Michael Moseley’s relief as Air Force Chief of Staff in 2008. Arnold Kanter adroitly observed that “for the services, the size of their budgets – both absolutely and relative to those of the other services – is *the* measure of organizational success.”²¹⁵ This was undoubtedly true for Moseley as he continuously pursued expensive conventional weapon systems to deliver on airpower’s claims. Falling prey to a self-interested manner that protects cultural preferences and identities, Moseley remained reluctant to focus Air Force acquisition priorities on the kind of war on which the service was embarked in both Iraq and Afghanistan. Instead, Moseley spent the vast majority of 2007 lamenting the lack of adequate Air Force funds and fending off

²¹³ Smith, *USAF Culture and Cohesion*, 15.

²¹⁴ Sanu Kainikara, *A Fresh Look at Air Power Doctrine* (Tuggeranong, Australia: Air Power Development Centre, 2008), 41.

²¹⁵ Arnold Kanter, *Defense Politics: A Budgetary Perspective* (Chicago, IL: University of Chicago Press, 1979), 5, quoted in Builder, *The Masks of War*, 20.

congressional protests on the cost of major acquisition priorities.²¹⁶ To bolster his case for additional funding to replace aging aircraft, Moseley used the maintenance of the independent capabilities of airpower as justification. In response to the argument that the Air Force should be focused on supporting counter-insurgency efforts, Moseley replied that “the fight we’re waging in Iraq and Afghanistan is not our only concern. It is not the only challenge to this country. We cannot afford to become target-fixated on counterterrorism or insurgency. We cannot completely focus on Iraq or Afghanistan and forget about the potentially global complexities in competitions in the future.”²¹⁷ This statement directly contradicted the viewpoint of Secretary of Defense Robert M. Gates.

In a speech delivered at Maxwell Air Force Base, Alabama in 2008, Secretary Gates criticized military leaders for the slow buildup of Unmanned Aerial Vehicles (UAV’s) patrolling the skies over Iraq and Afghanistan.²¹⁸ While Gates did not directly target the Air Force in his comments, the chosen location was an indication of the service he thought primarily responsible. Using pointed language to convey his frustration of the services’ unwillingness to adjust to changing strategic priorities, Gates stated that “people were stuck in old ways of doing business” and that correction “required the rethinking of long-standing service assumptions and priorities.”²¹⁹ The warning shot had been fired, and the Air Force had been placed on notice that the organizational culture dominated by the fighter mafia was being too inflexible.

Just one month later in a speech given at Colorado Springs, Colorado, Secretary Gates reemphasized his message on the need to shift the DOD’s acquisition focus from “next-war-it-is” to one which bought equipment to fight the likely wars of the future.²²⁰

He went on to state:

²¹⁶ Some of these priorities were: the F-22 Raptor, the F-35 Joint Strike Fighter Lightning II, the next generation bomber (B-3), and the KC-X replacement tanker. Gayle S. Putrich, “USAF seeks rebound for turbulent 2007,” *Defense News*, 17 December 2007, <http://www.defensenews.com/story.php?i=3281969> (accessed 24 March 2010).

²¹⁷ John T. Bennett, “China, Iran Top USAF’s Threat List: Anti-Terror Effort Takes Backseat in Procurement Priorities,” *Defense News*, 20 February 2007.

²¹⁸ Michael Hoffman, “Gates puts pressure on call for more UAVs,” *Air Force Times*, 22 April 2008, http://www.airforcetimes.com/news/2008/04/airforce_uav_callout_042108/ (accessed 23 March 2010).

²¹⁹ Michael Hoffman, “Gates puts pressure on call for more UAVs,” *Air Force Times*, 22 April 2008, http://www.airforcetimes.com/news/2008/04/airforce_uav_callout_042108/ (accessed 23 March 2010).

²²⁰ Secretary of Defense Robert M. Gates, “Next-War-it-is” (speech, Colorado Springs, CO, 13 May 2008), available at: <http://smallwarsjournal.com/blog/2008/05/secretary-gates-on-nextwaritis> (accessed 23 March 2010).

It is hard to conceive of any country confronting the United States directly in conventional terms – ship to ship, fighter to fighter, tank to tank – for some time to come. The record of the past quarter century is clear: the Soviets in Afghanistan, the Israelis in Lebanon, the United States in Somalia, Afghanistan, and Iraq. Smaller, irregular forces – insurgents, guerrillas, terrorists – will find ways, as they always have, to frustrate and neutralize the advantages of larger, regular militaries. And even nation-states will try to exploit our perceived vulnerabilities in an asymmetric way, rather than play to our inherent strengths. Overall, the kinds of capabilities we will most likely need in the years ahead will often resemble the kinds of capabilities we need today.²²¹

Gates' speech was delivered less than a month prior to Moseley's dismissal and was targeted yet again at the Air Force's reluctance to acquire additional UAV's to support the Army's counterinsurgency efforts. Despite Gates' pointed remarks, Moseley continued to place budgetary priority on acquiring additional F-22's.

It is incorrect to assume that the two warning shots delivered by Gates toward the Air Force in 2008 represented the first time the fighter mafia had been told of the need to acquire additional UAVs. In fact, in February 2005, then Air Force Chief of Staff General John P. Jumper was aware of the UAV shortfall and told Congress "we are going to tell General Atomics to build every Predator they can possibly build."²²² Despite these assurances, Jumper and his successor continued to place priority in budget battles for the F-22. There are multiple explanations for Generals Jumper's and Moseley's prioritization of the F-22.²²³ Two of these have their basis in the cultural identity of the fighter mafia. First, acquiring additional UAV's instead of more F-22's did not increase

²²¹ Gates, "Next-War-it-is" (speech, 13 May 2008), available at:

<http://smallwarsjournal.com/blog/2008/05/secretary-gates-on-nextwaritis> (accessed 23 March 2010).

²²² Although Gates did not assume the office of Secretary of Defense until 18 December 2006, Army complaints on the lacks of UAV's in 2005 prompted this response from General Jumper when he appeared before Congress. Bruce V. Bigelow, "Demand for Predators Soars," *SignonSanDiego.com*, 16 February 2005, <http://legacy.signonsandiego.com/news/business/20050216-833-demandfo.html> (accessed 23 March 2010).

²²³ Although not addressed in this study, the military threat of a rising China and maintenance of long-term American influence in the Western Pacific are two national security arguments the Air Force has used to justify procurement of addition numbers of fifth-generation F-22's above the final-buy ceiling (187 aircraft) established by Secretary Gates. Concerned about the fourth-generation fighters currently possessed by China and Russia's development of a fifth-generation fighter (Sukhoi PAK FA) specifically designed to compete with the F-22, the Air Force argues that the future of American air combat capabilities need to be based on the stealthy, fast, maneuverable F-22 that is unmatched by any known or projected combat aircraft. Merrill A. McPeak, "Why We Need the F-22," *Wall Street Journal*, 9 August 2009, <http://online.wsj.com/article/SB10001424052970204908604574332870284931470.html> (accessed 6 May 2010).

the service's institutional security. Rather, UAV's decreased the autonomous strength of the Air Force because of the direct support nature of the mission to the Army.²²⁴ Second, UAV's have no pilot in the cockpit. Charles Duhigg explains the reasons for the fighter mafia's apprehension when he states that "when defense contractors talk about UAVs, they advertise them as cheap replacements for fighter pilots who never want to be replaced."²²⁵ Therefore, this movement toward unmanned platforms struck at the very *essence* of the beliefs of the *corps* around the *core* of the fighter mafia's institutional identity. Interestingly, the fighter mafia's reluctance to acquire UAV's was similar to that taken by the bomber barons of the late 1950s when they too were confronted by an unmanned threat, the ICBM.

While these institutional identity issues help explain why the Air Force was hesitant to assign UAVs budgetary priority, they do not provide the complete story. In his article, "A Decade, No Progress," Douglas MacGregor provides another reason for the Air Force's reluctance to embrace the UAV. He argues that in the decade following the First Gulf War, the Air Force placed "unwavering faith that extended bombing by airpower could have alone won the war. This belief did not promote jointness with the other services. Instead, Instant Thunder simply became the model for future air warfare and every [acquisition priority] took second place behind that of the Air Force's post-war operational centerpiece, the F-22."²²⁶

Whether strategically, institutionally, or paradigmatically based, Moseley continued to place priority on acquiring the independent weapons capabilities needed to fight the next war and not the joint capabilities demanded by the Secretary of Defense for the current fight. This all came to a head after several troubling lapses of nuclear security by the Air Force.²²⁷ On 5 June 2008, Secretary Gates asked Secretary of the Air Force

²²⁴ This issue of Air Force institutional legitimacy was discussed in Chapter 1. Please recall that the Air Force has always shunned direct support missions because they are not the independent air mission on which its autonomous strength relies.

²²⁵ Charles Duhigg, "The Pilotless Plane That Only Looks Like Child's Play," *The New York Times*, 15 April 2007, <http://query.nytimes.com/gst/fullpage.html?res=9907E2D6133FF936A25757C0A9619C8B63&sec=&spon=&pagewanted=3> (accessed 27 March 2010).

²²⁶ Douglas A. MacGregor, "A Decade, No Progress" *Joint Force Quarterly* (Winter 2000-01) 18-19.

²²⁷ Robert Burns and Lolita C. Baldor, "Gates Recommends Schwartz as next Air Force Chief," *USA Today*, 09 June 2008, http://www.usatoday.com/news/washington/2008-06-09-264532382_x.htm (accessed 23 March 2010).

Michael Wynne and General Moseley to resign. In Moseley's place, Gates placed mobility and special operations pilot General Norton A. Schwartz as the first non-Combat Air Force (CAF) pilot to serve as military head of the Air Force. Determined to increase the pace of cultural change, Gates's infusion of an outsider into the top position of the Air Force's leadership elite supplanted the hierarchical sub-culture responsible for resisting transformation.

The public reason Gates gave for the removal of the Air Force's senior leadership was two-fold: "to hold them accountable for failing to fully correct the erosion of nuclear-related performance standards, and to halt a long-term drift in the service's focus."²²⁸ However, *Newsweek*'s John Barry reported that the latter reason was clearly more important than the former.²²⁹ Regardless of the true reason for Gates's decision, the ultimate impact on the organization remained the same. Moseley's replacement by a non-CAF pilot ushered in an "institutional identity crisis that placed it at the historical nadir of confidence, reputation, and influence."²³⁰

Schein provides thorough warning of the dangers that occur to an organization's institutional identity when an outsider is forcibly infused atop the leadership elite. The high levels of anxiety that occur when the cultural assumptions of the dominant tribe are brought into question by a new leader not emotionally embedded to the dominant culture can lead to organizational chaos. Nevertheless, since Gates chose to pursue institutional change in this manner, it now falls upon General Schwartz to develop strategies not only to manage the cultural conflict that is sure to ensue, but also to impart a new identity upon the service that reflects the strategic focus of the DOD. This is going to be a difficult task to accomplish given the tremendous organizational disparity and tribalism that currently exist within the Air Force.

Summary

This chapter has examined the historical influences that shaped Air Force organizational culture from 1918 to the present. In this investigation, we have learned

²²⁸ Robert Burns and Lolita C. Baldor, "Gates Recommends Schwartz as next Air Force Chief," *USA Today*, 09 June 2008, http://www.usatoday.com/news/washington/2008-06-09-264532382_x.htm (accessed 23 March 2010).

²²⁹ John Barry, "Deplaned: Behind Defense Secretary Gate's Air Force shake-up," *Newsweek*, 6 June 2008, <http://www.newsweek.com/id/140276/page/1> (accessed 23 March 2010).

²³⁰ Thomas P. Ehrhard, *An Air Force Strategy for the Long Haul*. (Washington, DC: Center for Strategic and Budgetary Assessments, 2009), 28.

that although the dominant groups changed, the organizational mask of war has remained the same. Simply put, the Air Force has consistently promoted the decisiveness of airpower. Whether it was via strategic bombardment advocated by the bomber generals, or via strategic attack advocated by the fighter generals, the overarching need to maintain Air Force legitimacy as an autonomous organization not subordinated to the Army remained. Perennially identifying itself as the independent airpower organization that only exists “To Fly, Fight, and Win...in the Air,” the manner in which it flew, fought, and won were reflected in the doctrinal missions favored by the dominant tribe’s paradigmatic theory of air warfare. This investigation has also shown that budgetary priorities always followed the acquisition desires of the dominant tribal group, and were often conducted at the expense of the Air Force’s other organizational tribes. Eschewing joint missions in favor of independent air operations, both monarchic tribes ultimately based their acquisition priorities on weapons systems designed to deliver the strategic effects the Air Force believed it needed to prove that it could be a solitary war-winner.

We have also seen how the underlying assumptions of organizational culture transformed within the Air Force. The Air Force’s institutional identity has always revolved around what has been referred to as the *essence* of the *corps* around the *core* of the dominant tribe. Furthermore, this investigation has also shown how the survival mechanism of the leadership elite responded to perceived changes in the external environment. From the bomber generals’ denial of strategic bombardment’s relative ineffectiveness in the Second, Korean, and Vietnam Wars, to the insistence that the First Gulf and Kosovo Wars had proven that airpower had finally become the decisive instrument of warfare, we have learned that organizational culture in mid-life institutions is slow to change due to the self-centeredness of the dominant tribe.

This analysis has also demonstrated that like every durable group, the two dominant tribes that came to control the Air Force acquired their respective personalities based on their experiences in warfare. These, in turn, shaped their perception of the strategic situation and affected their behavior on both the budgetary and military battlefields. Furthermore, by understanding the historical circumstances behind the tribal conflict between the bomber and fighter communities, we are now able to look past the tribal veneers and see why this behavior occurred. Only by thoroughly grasping both

how and why tribal conflict occurs will leadership be able to minimize organizational pitfalls and effect meaningful and lasting cultural change in an institution. If the Air Force is to be successful in overcoming the entrenched bureaucracy committed to the status quo, it must understand the unconscious underlying tribal assumptions that conspire to resist organizational change. This topic will be investigated in the next chapter.

Chapter 3

Tribalism in the Air Force

In the absence of a unifying cause, the Air Force has fractionated into factions devoted to missiles, space, and different kinds of airplanes. The aviators, by right of history and seniority, retained control of the institution; but their evident affection for their airplanes created a caste and hence, competition among the factions. What emerged was an institution devoted to disparate means more than to unifying ends, with destructive effects upon institutional morale, dedication, and values.

-- Carl Builder

Any organization with specialized functions and departments is made up of groups—which we shall call “tribes”—that look at their work and at the organization in very different ways. They have their own dialects, values, histories, ways of thinking, and rules for appropriate behavior.

--Peg Neuhauser

In his book, *Defense Politics: A Budgetary Perspective*, Arnold Kanter views the Air Force as the least cohesive of the military services. He attributes its fragmentation to the specialized nature of technologies, the specialization of its wing structure, and the relative isolation of its specialized tribes from each other.¹ Builder agrees with Kanter's assessment and contends that the Air Force's weak institutional identity results from the lack of a service unifying vision that encourages Airmen to subconsciously devote loyalty to the technological functions of his/her particular tribe rather than to the organization as a whole.² At the core of both Kanter's and Builder's observations are the roles that both

¹ It is interesting to note that Kanter found the opposite to be true for the other technologically oriented service, the Navy. Kanter found that although the Navy was a service comprised of distinct and diverse tribal skill-sets, the naval task force operated as an interdependent operational organization. This operational interdependence provided a binding force across weapon systems and specialties, with cohesion being reinforced through multi-specialty interaction in the ports and wardrooms of the task force. Taken together, the operational deployments and combat interdependencies have served to mold the Navy together into a fairly cohesive whole. Arnold Kanter, *Defense Politics: A Budgetary Perspective* (Chicago, IL: University of Chicago Press, 1979), 18-20. Builder agrees and gives another reason why the Navy is a more cohesive organization; namely that US naval officers see themselves as naval officers first and specialists second due to the strong institutional identity (love of the sea) that has been inculcated in the organization. Carl Builder, *The Masks of War: American Military Styles in Strategy and Analysis*, (Baltimore, MD: The Johns Hopkins University Press, 1989), 26.

² Carl H. Builder, *The Icarus Syndrome: The Role of Air Power in the Evolution and Fate of the U.S. Air Force*, (New Brunswick, NJ: Transaction Publishers, 1996), 6.

technology and tribalism play in inhibiting the implementation of a unifying institutional identity. This chapter investigates those issues. It begins with an overview of the role technology plays in the Air Force and is followed by a brief examination of how tribalism developed within the sub-cultures of this service. It concludes by analyzing how the existence of these sub-cultures adversely affects organizational cohesion and impedes establishment of a coherent institutional identity.

The Role of Technology in the Air Force

Builder appropriately identified technology as the Air Force's chosen *altar of worship*. Harkening back to the days of Arnold's establishment of the Scientific Advisory Group, Builder suggests that the Air Force's worship of technology led the institution to adopt an organizational vision that features an almost compulsive need to expand its horizons through the never-ending pursuit of highly capable technological toys.³ Builder is not the only writer to suggest an almost spiritual connection between the Air Force and technology. In his article, "The Development of Airpower Theory," Colonel Philip Meilinger argues that the eternal forward-looking gaze of the Air Force has transformed the pursuit of advanced technology into the third pillar of airpower theory, alongside those of history and doctrine.⁴

Glenn Pascall offers another viewpoint about why the Air Force worships at the altar of technology. Pascall suggests that "in World War II, there seemed to be an entirely positive relationship between advanced design and capability in that airpower technology extended the reach and effectiveness of the human combatant."⁵ Pascall also states that this historical link has long since faded and that the Air Force's current quest

³ Builder, *The Masks of War*, 19. In November 1944, General Arnold knew that WWII was already, in essence, won. Concerned about the future of airpower in the post-war US, Arnold asked Dr. Theodor von Karman, the US's leading research aerodynamicist, to lead a group of fellow scientists to plan USAAF aeronautical research for as far as five decades into the future. Von Karman agreed, and on 7 November 1944, the USAAF Scientific Advisory Group (SAG) was established. Arnold wanted to be sure that the SAG not dwell on the last war, but instead look ahead to the future to see what intensive research programs might develop in the fields of electronics (with emphasis on radar), aerodynamics, propulsion (jet turbine and rocket), and the basic sciences needed to enhance overall aviation. The report that was produced by von Karman in December 1945 was titled "Toward New Horizons." Walter J. Boyne, *Beyond the Wild Blue: A History of the U.S. Air Force* (New York, NY: St. Martin's Griffin, 1997), 17.

⁴ Col Philip Meilinger "The Development of Airpower Theory," in *Air Power Leadership: Theory and Practice*, ed. Peter W. Gray and Sebastian Cox (Joint Doctrine and Concepts Center, Wiltshire, London: The Stationery Office, 2002), 92.

⁵ Glenn Pascall, *The Trillion Dollar Budget: How to Stop the Bankrupting of America* (Washington, DC.: University of Washington Press, 1985), 93.

for technology has taken on a life of its own. Pascall implies that Air Force leadership's crusade for advanced technologies has placed it firmly into the *technological determinism* camp of innovation. Technological determinism is a theory that posits that technological innovation is inevitable because "you can never stop progress."⁶ Accordingly, innovation is beyond the control of individuals or organizations. As Philip Scranton argues, the notion of determinism inhibits the ability of individuals and institutions to stop technological advancements because technology is self-generating and automatically adapts and diffuses to the environment into which it is released.⁷

As a deterministically-prone organization, the Air Force remains infatuated with technology and the potential advantages it can provide in future conflicts. Because the worship of technology forms the *essence* of the *corps* around the *core* of every Air Force tribe, it remains the bedrock on which its organizational culture is founded. This overarching focus has not only been articulated by senior leadership since 1947, but is also reflected in how the service recruits future Airmen. The Air Force's increasing involvement in space and cyberspace activities now necessitates promotion of a service culture that attracts like-minded people to fill the roles of all its sub-cultures, pilots and non-pilots alike. This changing technological focus from the Air Force's manned flight Cold War heyday is reflected in not only its current mission statement, "To fly, fight, and win...in air, space, and cyberspace," but also in its recruiting slogan, "It's not science fiction, it's what the United States Air Force does every day."⁸ Technology is so revered

⁶ For a thorough rendition of technological determinism, see Merritt Roe Smith, "Technological Determinism in American Culture," in *Does Technology Drive History?*, ed. Merritt Roe Smith et al. (Cambridge, MA: The Massachusetts Institute of Technology Press, 1994), 2-35. There is a countervailing viewpoint to the technological deterministic school of thought, and that is *social constructivism*. Constructivists argue that technology is strongly, if not entirely, shaped by the cultural, political, and economic forces of society. Accordingly, technology is nothing more than a tool that can be adapted for use; it is amorphous and inert until shaped and formed by the whims of society. In essence, social predilections are the sole reason why certain technologies either thrive or fail. For a thorough discussion of social constructivism, see Trevor J. Pinch and Wiebe E. Bijker's, "The Social Construction of Facts and Artifacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other," in *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, ed. Wiebe E. Bijker et al. (Cambridge, MA: The Massachusetts Institute of Technology Press, 1987), 18-19.

⁷ Philip Scranton, "Determinism and Indeterminacy in the History of Technology," in *Does Technology Drive History?*, ed. Merritt Roe Smith et al. (Cambridge, MA: The Massachusetts Institute of Technology Press, 1994), 144.

⁸ Interestingly, on the USAF's official recruiting website, none of the images in the streaming video are related to manned aircraft. Instead, the first is the UAV with the slogan "the fighting machines of the future are here today" followed by an advertisement for Space Command "where controlling the high

by the service that it lists providing *technology to warfighting* as one of its three core competencies on its recruiting website.⁹

The pursuit of the next technological Holy Grail by the Air Force was recently reinforced by General Schwartz in a 2009 speech given to the Air Force Association when he reminded the audience of the impetus behind General Arnold's "Toward New Horizons" study. Aware that the days of large budgets are over, Schwartz initiated a "Technology Horizons" study to identify fiscally responsible capabilities that could significantly change the way the service accomplishes its future missions. Focusing on identifying the most promising technologies the Air Force can adopt to give it the flexibility to respond to the changing character of warfare of the twenty-first century, he made a point of emphasizing the role that cyberspace and electronic warfare technologies will have on the battlespace of the future.¹⁰ This vision of warfare is reflected in the 2007 Air Force Chief of Staff white paper, *Global Vigilance, Reach and Power*, and is prominently displayed on the Air Force's website as the means in which it will "fly, fight, and win...in air, space, and cyberspace."¹¹

But as James M. Smith first noted in 1998, technological advances from the late 1980s have now empowered the other "non-traditional tribes." "By the late 1980s, the primary Air Force internal divisions began to revolve around technologies, with splits between pilots and all others; with missiles beginning to assert a claim on a piece of the core, and between types of systems the pilots flew—between fighter and bomber pilots,

ground begins with the Air Force's satellite network." Furthermore, in the "Learn about the Air Force" drop-down menu, the category "Technology" is only one of five subjects covered. The others are "Our Mission," "Our Values," "Airmen's Creed", and "History." Information derived from "The USAF Official Website" located at: <http://www.airforce.com/learn-about/our-mission> (accessed 01 April 2010).

⁹ Information derived from "The USAF Official Website" located at: <http://www.airforce.com/learn-about/our-mission> (accessed 01 April 2010).

¹⁰ General Norman A. Schwartz, Chief of Staff, US Air Force (address, Air Force Association Convention, Washington, D.C., 15 September 2009). Information derived from: MSgt Russell Petcoff, "CSAF Addresses AFA Convention," *Secretary of the Air Force Public Affairs Office*, 15 September 2009, <http://www.af.mil/news/story.asp?id=123167925> (accessed 01 April 2010).

¹¹ The Air Force defines global vigilance as "the persistent, worldwide capability to keep an unblinking eye on any entity--to provide warning on capabilities and intentions, as well as identify needs and opportunities"; global reach as "the ability to move, supply, or position assets--with unrivaled velocity and precision--anywhere on the planet"; and global power as "the ability to hold at risk or strike any target, anywhere in the world, and project swift, decisive, precise effects." General T. Michael Moseley, "The Nations Guardians: America's 21st Century Air Force," CSAF White Paper (Washington, DC: Department of the Air Force, Office of the Chief of Staff, 29 December 2007), 1, Information obtained from: <http://www.af.mil/shared/media/document/AFD-080207-048.pdf> (accessed 01 April 2010).

between transport pilots and “combat” fliers, and even between air-to-air and deep interdiction pilots and close air support pilots.”¹² This, in turn, was followed by the first Gulf War, which proved to be a watershed in tribal dynamics. That war highlighted the important role that space and information domination would play in future conflicts and empowered several of the up-and-coming tribes.¹³ Because of this empowerment of the non-traditional tribes, Smith warned that the Air Force could no longer justify dividing the tribes between pilots and all others. Rather, the Air Force must now establish an institutional identity that includes the contributions of all its tribes, an identity that “embraces all its technologies, missions, and organizational concepts.”¹⁴ But there is a contradiction here. The very technological advances that form the foundational basis of the Air Force’s service-wide institutional identity also act to inhibit the creation of such an identity by welding people to the tribal technological capabilities they master.

The Tribal Identities of the Air Force

Peg Neuhauser, a recognized organizational conflict expert, writes of tribes competing for dominance within organizations. All tribes have their own dialects, values, histories, ways of thinking, and rules for appropriate behavior.¹⁵ Gareth Morgan agrees with Neuhauser in that “organizations are min-societies that have their own distinctive patterns of culture and sub-culture.”¹⁶ Describing fragmented organizations as comprising tribal groups “that think about the world in very different ways, or that have different aspirations as to what their organization should be, these different patterns or beliefs can exert a decisive influence on the overall ability of the organization to deal with the challenges it faces.”¹⁷ In a service so closely associated with technology, it is not surprising that the tribal identities of the Air Force’s mini-societies align with either the technology being used (space/cyberspace) or the weapon system being exploited (missiles/aircraft type).

Tribalism is not necessarily bad for an organization. If tribal conflict is managed well, it can create innovation, objectivity, increase the analytical ability of the

¹² Smith, *USAF Culture and Cohesion*, 12.

¹³ Smith, *USAF Culture and Cohesion*, 15.

¹⁴ Smith, *USAF Culture and Cohesion*, 16.

¹⁵ Peg Neuhauser, *Tribal Warfare in Organizations*, (Cambridge, MA: Ballinger Publishing Company, 1988), 4-5.

¹⁶ Gareth Morgan, *Images of Organization* (Newbury Park, CA: SAGE Publications, Inc., 1986), 121.

¹⁷ Gareth Morgan, *Images of Organization* (Newbury Park, CA: SAGE Publications, Inc., 1986), 121.

organization, and also protect against “group think.”¹⁸ But, the majority of organizations do not manage tribal rivalry well. Conflict ensues when tribal loyalty supersedes organizational loyalty and when tribal values do not coalesce with the overarching values of the organization. Thus, in a tribally divided organization, “if you ask employees about the most important thing in their job or department, they will most likely answer first by telling you about their tribal values.”¹⁹ Builder contends that this is happening in the Air Force today. The focus on tribal values centered on aircraft or technological systems has resulted in loyalty being given to airframes or commands instead of to the broader organization.²⁰ This tendency, coupled with the lack of an integrating vision that adequately recognizes the contributions of its non-pilot tribes, forges weak membership ties to the institution as a whole.²¹ Smith found merit in Builder’s claim by discovering that “40-50 percent of junior officer flyers identified themselves as pilots first—they just happened to be practicing that occupation for the Air Force.”²² Surprisingly, even though the pilot force is at the heart of Air Force combat operations and is the tribe that “supposedly comprises the more institutional part of the service, the pilot force was found to be the more occupational of Air Force specialties, with the non-flying support officers having a much higher degree of institutional loyalty.”²³

Neuhauser warns that the dangers of occupational tribalism increase as members rise through the upper leadership ranks of the organization. She states that “if the senior

¹⁸ The term “groupthink” is attributed to social psychologist, Irving L. Janis. Janis listed seven characteristics of groupthink: (1) A shared illusion of invulnerability, which generates false optimism and lack of caution, (2) Direct pressure on deviants, (3) A fear of disapproval, which keeps new alternatives from emerging, (4) An illusion of unanimity, so that when someone from the majority view speaks, his or her pronouncement is seen as accepted by everyone else in the group, (5) A failure to explore the moral or ethical consequences of group decisions, (6) “Mindguards” who protect the leader from criticism, and (7) Group efforts to rationalize or deny all ill omens. Ralph C. Chandler and Jack C. Plano, *The Public Administration Dictionary* (New York, NY: John Wiley & Sons, Inc., 1982), 120-121.

¹⁹ Neuhauser, *Tribal Warfare in Organizations*, 23-24.

²⁰ Carl H. Builder, *The Icarus Syndrome: The Role of Air Power in the Evolution and Fate of the U.S. Air Force*, (New Brunswick, NJ: Transaction Publishers, 1996), 6.

²¹ Builder, *The Icarus Syndrome*, 6.

²² This data is from two decades of attempts by Dr. Frank Wood to measure institutional and occupational attitudes within the USAF across the 1970s and 1980s. Woods found that the high technology emphasis of the USAF makes it most susceptible to specialization and occupational attachments, particularly for specialties which have civilian air and space equivalents. Frank R. Wood, “At The Cutting Edge of Institutional and Occupational Trends: The US Air Force Officer Corps,” in Moskos and Wood, *The Military: More Than Just a Job?*, 27-30, quoted in, Smith, *USAF Culture and Cohesion*, 18-19.

²³ Wood, “At The Cutting Edge of Institutional and Occupational Trends,” 31-32, quoted in, Smith, *USAF Culture and Cohesion*, 19.

management person making the decision came up through the ranks of one particular tribe, then he/she is likely to be biased in favor of the current tribal members.”²⁴ This is particularly true at the senior leadership level when organizational decisions have to be made concerning scarce budgetary or personnel resources. In essence, tribalism often affects a senior leader’s decision-making objectivity because his/her ultimate loyalty resides with ensuring the good of the tribe over that of the organizational whole.

Neuhauser also found that senior leaders who have been stove-piped through the ranks have a difficult time transitioning from their tribal role to senior leadership positions that span several tribes. In fact, “people who have been very skillful as leaders of their own tribes can have a difficult time adjusting to this new and expanded role after they are promoted. Their loyalties may stay with their original tribe, making it easy for them to see only that point of view in any dispute or planning effort.”²⁵

This invariably gives rise to an organization with a biased decision-making and promotion process that favors the dominant tribe. In any closed system organization with a centralized subgroup power structure that favors promotion of dominant tribe members to senior leadership positions, as the Air Force currently does, a monarchic tribal structure will invariably arise.²⁶ As the elites, this monarchic tribe is in a position to dictate the underlying assumptions (i.e. the institutional identity of the organization) upon

²⁴ Neuhauser also states “that management people who have moved around the organization, in and out of many different tribes, are much less likely to suffer from this natural bias.” Neuhauser, *Tribal Warfare in Organizations*, 98-99.

²⁵ Neuhauser, *Tribal Warfare in Organizations*, 137.

²⁶ Smith believes that the organizational cultures of the US military services are particularly strong because these organizations employ a “closed career principle” and promote from within. Military officers are therefore “educated, trained, and advanced by the organization based on its internal rules and priorities.” Further, the military offers “tailored professional education programs to prepare career officers to move up the chain of responsibility for the [dominant tribes] core mission, and they promote these career personnel into the decision and policymaking levels within their career elite with only limited external veto and no real external competition.” Smith, *USAF Culture and Cohesion*, 7-8. Although the Army and Navy also operate on a “closed career principle” and promote from within, both organizations are feudal in nature because the subgroup power structure of each respective service is *decentralized*. In both of these services, the dominant subgroups of the Army (infantry, artillery, armor) and the Navy (surface, subsurface, aviation) hold considerable power within the service and serve as a balancing force that prevents service domination by a single tribe. Furthermore, since the path for advancement above the O-6 level resides in successful command of either a brigade-level unit (Army) or a ship (Navy) and is available to all members of the dominant subgroups, both the Army and Navy have been able to maintain its traditional power sharing structure. In fact, the record shows that both the Army and Navy have been able to maintain its feudalism by allowing a rotation between its dominant subgroups to serve as Army Chief of Staff and the Chief of Naval Operations. Thomas P. Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services: A Comparative Study of Weapons System Innovation” (PhD diss., Johns Hopkins University, 2000), 77, 81.

the lesser, weaker tribes. This elite group also provides the bulk of senior leadership, controls the personnel and promotion systems, and directs institutional policies found in doctrine. All of these dominant tribal traits were evident in the monarchic leadership reigns of both the bomber and fighter generals when the budget, doctrine, and promotions invariably favored the dominant tribe.

James M. Smith noted that when a common vision is shared by the various tribes in wartime, organizational conflict is at a minimum. Yet changes to the institution's external security environment such as new military threats or different DOD priorities in peacetime can disrupt this internal cohesion as organizations develop innovative strategies to manage new uncertainties.²⁷ Both occurred during the transition of power between the bomber and fighter generals when the strategic focus shifted from unlimited to limited wars and from strategic to tactical airpower. An altered external environment can also lead to a new hierarchy of missions that leads to a slow redistribution of power between institutional tribes as organizational roles and missions change in response to external national security threats. As members of new tribes gain leadership positions and attempt to solidify their tribe's hold on the institution, they produce new or changed career paths to grow organizational members into future leadership positions at all levels.²⁸ Although James March describes this as a continuous competition between the "successful" and the "ambitious," the concept remains the same in that tribes will always compete for institutional dominance.²⁹

Historically within the Air Force, the competition for organization dominance has been limited to the combat pilots of the bomber tribe and fighter tribe.³⁰ However, the issue of tribal competition within the Air Force has been complicated by the rise of other specialties (e.g. space, cyberspace, and Intelligence, Surveillance and Reconnaissance)

²⁷ Stephen P. Rosen, *Winning the Next War: Innovation and the Modern Military* (Ithaca, NY: Cornell University Press, 1991), 258.

²⁸ General Merrill McPeak personified this tactic best when he dissolved SAC and placed it under the fighter-pilot dominated Air Combat Command. Smith, *USAF Culture and Cohesion*, 10.

²⁹ James G. March, *A Primer on Decision Making: How Decisions Happen* (New York, NY: The Free Press, 1994), 115.

³⁰ For purposes of tribal comparison, the bomber tribe aircraft currently includes the B-1, B-2, and B-52 (AFSCs 11Bxx and 12Bxx). The fighter tribe aircraft currently include: A-10, EA-6B, F-15, F-16, F-22, and the soon to be F-35 (AFSCs 11Fxx and 12Fxx).

following the 1991 Gulf War.³¹ As James M. Smith observed, the recent empowerment of non-traditional tribes reflects the fact that they have steadily grown in importance. Their newly found strength, coupled with the increasing importance of mobility operations in airpower strategy since the end of the Cold War, means that the Air Force must reevaluate its historic practice of institutional favoritism toward the combat pilot. For as Builder stated, “if leadership is only limited to a certain [tribe], then even greater mischief will result, for such self-serving elitism sows the seeds of discontent among those whose contributions have been denigrated and who have been excluded from any hope of leadership.”³²

What follows is a brief examination of four non-traditional tribes that the Air Force must include in senior leadership positions if it is to succeed in creating an institutional identity readily acceptable by the organizational whole. Furthermore, this new tribal leadership mixture is necessary for the Air Force to prevent the group-think mentality that has plagued its senior leadership since 1947. A more varied senior leadership group will better posture the Air Force to respond appropriately to the changing external threats posed to the US’s national security.³³ The four new tribes that will be examined are the delphic, mobility, special operations, and support tribes.

Delphic Tribe³⁴

The delphic tribe consists of Airmen who create and control the battlespace picture, to include airborne and space intelligence, surveillance and reconnaissance assets, command and control, electronic warfare, information operations, intelligence and

³¹ David Lonsdale describes the effects that the Revolution in Military Affairs (RMA) has had on the character of warfare following the First Gulf War. Although he “concludes that the information age has not de-legitimized the Clausewitzian climate and nature of war,” he does acknowledge that the RMA has ushered in an era of unprecedented communications technologies where sophisticated strategies of informational and electronic warfare are now commonplace. Furthermore, the RMA has also transformed the three-dimensional *battlefield* into a four-dimensional *battlespace* where the medium of space and cyberspace has gained increased military importance. See David J. Lonsdale, *The Nature of War in the Information Age: Clausewitzian Future*, (New York, NY: Frank Cass, 2004).

³² Builder, *The Icarus Syndrome*, 227.

³³ The non-traditional tribes discussed will utilize the definitions developed by Major WM Bruce Danskine in his thesis “The Fall of The Fighter Generals: The Future of USAF Leadership” (Master’s thesis, School of Advanced Airpower Studies, 2001), 22-24.

³⁴ The Delphic Tribe label derives its name from the Oracle of Apollo at Delphi. Greek mythology states that the god Apollo spoke through a human priestess who offered guidance to all who sought Apollo’s aid. The Delphic Oracle was thus regarded as a source of wise counsel or prophetic authority. The Delphic Oracle could predict the future, in much the same manner that the Delphic Tribe is expected to predict the future battlespace picture upon which commanders base decisions.

weather functions.³⁵ It is a long-standing tribe that draws its lineage from balloonists who conducted reconnaissance efforts during the American Civil War. Balloonists represented a critical extension of reconnaissance into the third dimension and were highly valued because the side able to achieve an information advantage over its enemy also had an operational advantage. In recent years, this has expanded well beyond traditional terrestrial reconnaissance and now includes a wide field of capabilities collectively termed Intelligence, Surveillance, and Reconnaissance (ISR). ISR now includes sensors and systems, both airborne and space borne, that cover the entire electromagnetic spectrum. Satellites look for infrared indications of missile launch; space imagery determines target positions; sensors detect electronic emissions and sound waves; and global space-based positioning systems allow for precision weapons employment. Members of the intelligence, weather, communications, computer systems, and information operations career fields not only interpret available information of the battlespace and enemy actions, but also protect friendly capabilities to exploit this battlespace. Although this tribe is diverse and contains a wide-range of Air Force Specialty Codes (AFSCs), its members share the common goal of creating an accurate battlespace picture from which the commander can gain situational awareness.³⁶ With the important role that information plays in prosecuting the American way of war, this tribe is on the rise.³⁷

Mobility Tribe

The mobility tribe is comprised of the airlift and air refueling communities.³⁸ The central role of this tribe has always been as a logistics force multiplier that enables other

³⁵ Remainder of this paragraph is based on Danskine, “The Fall of The Fighter Generals,” 22.

³⁶ The delphic tribe includes a wide range of AFSCs, to include officers working in the following career fields: air battle managers, computer and communications, information operations, aircrewmembers of the E-3, E-4, E-8, EC-130, RC-135, RQ-1A, RQ-4A,U-2, UV-18, space command, missileer, intelligence, weather, and UAV pilots (AFSCs 11Rxx, 12Rxx, 13Bxx, 13Sxx, 14Nxx, 15Wxx, 33Sxx, 11Uxx).

³⁷ The importance of the non-rated delphic tribe cannot be discounted, and this fact is reflected in its relative proportionality in the senior leadership ranks of the Air Force. Comprising 16 percent of the Air Force total (7,687 out of 49,907 officers), currently one out of 14 Generals (7 percent) and five out of 37 (14 percent) Lieutenant Generals are non-rated members from the delphic tribe. The following information is current as of May 6, 2010 and was found at the AFPC personnel reports website at:

<http://www.afpc.randolph.af.mil/demographics/reportSearch.asp>. Information for General Officers derived from USAF official biographies site at: <http://www.af.mil/information/bios/results.asp>.

³⁸ Unless otherwise noted, remainder of this paragraph is based on Danskine, “The Fall of The Fighter Generals,” 22-23. Mobility tribe aircraft include: C-5, C-9, C-17, C-21, C-130, C-141, KC-10, and KC-135 (AFSCs 11Axx, 11Txx, 12Axx, and 12Txx).

tribes to engage the enemy. However, there have been several times in Air Force history when it has been the main effort. The most famous example was the Berlin Airlift of 1948-49, when both American and British airlift transported essential supplies into the beleaguered city, thus demonstrating the West's ability to win a political victory without resorting to military confrontation. In the immediate years following the end of the Cold War, many of America's military operations around the world were not force-on-force engagements, but humanitarian operations conducted by mobility airlift assets. As the number and importance of mobility-centric operations increased, the number of generals with mobility expertise also increased, especially at the most senior levels of the Air Force. This is also a tribe on the rise. For example, in 1997 one out of 11 four-star generals (9 percent) and three out of 36 three-star generals (8 percent) had a mobility background.³⁹ But by 2007, two out of 12 four-star generals (16 percent) and 10 out of 40 three star-generals (25 percent) had mobility experience.⁴⁰ In 2010, the mobility tribe comprised four out of 14 four-star generals (29 percent) and five out of 37 three-star generals (14 percent).⁴¹ The rise of the mobility generals in the post-Cold War era indicates that the Air Force is slowly changing "its internal organization to match a changing external environment," which benefits both the Air Force and the nation writ large.⁴²

Special Operations Tribe

The special operations tribe is a hybrid of air and ground forces.⁴³ This tribe is much smaller than the rest of the tribes but has grown increasingly important as the focus of the DOD has shifted to the prosecution of irregular wars. Organized and equipped for the type of unconventional conflicts the nation is likely to face in the foreseeable future, this tribe rests largely outside the Air Force command structure and rests in the US Special Operations Command (USSOCOM). Nevertheless, this tribe is on the rise as USSOCOM increasingly deploys assets throughout the globe to participate in direct

³⁹ Major Laura L. Lenderman, *The Rise of Air Mobility and Its Generals*, Drew Paper no. 1 (Maxwell Air Force Base, AL: Air University Press), 2008, xiv.

⁴⁰ Lenderman, *The Rise of Air Mobility and Its Generals*, xiv.

⁴¹ Information for General Officers derived from USAF official biographies site at: <http://www.af.mil/information/bios/results.asp>.

⁴² Danskine, "The Fall of The Fighter Generals," 2.

⁴³ Special Operations tribe aircraft include: AC-130, CV-22, MC-130, MH-53 11sxx 12sxx (AFSCs 11Sxx)

action missions against terrorists and insurgents. The most famous alumnus of this tribe is General Schwartz, the current Air Force Chief of Staff.⁴⁴

Support Tribe

Frequently overlooked in an air-centric organization, the support tribe is perennially important—the glue that holds the service together.⁴⁵ Without the efforts of this tribe, the Air Force would be unable to function. It has been said that “an Army moves on its stomach.” In a similar vein, an “Air Force moves from an airfield,” which has to be secure and contain all the organic support (fuel, spare parts, billeting) and complex technological systems required to maintain sustained combat operations. Not considered to be “operators” in the Air Force because they do not directly control either aircraft or spacecraft, this tribe consists of security forces, civil engineering, communications, services, and logistic specialists.⁴⁶ This is the least monolithic of the tribes, being composed of many sub-tribes due to the widely varied nature of the support functions they provide. Nevertheless, for the purposes of this thesis, the work they do is conceptually united and will therefore be considered a homogeneous entity. Of all the tribes, this one is most underrepresented in the senior leadership positions of the Air Force even though it comprises 61 percent of the officer corps.⁴⁷ Currently, none of the 14 full generals and four of 37 (11 percent) lieutenant generals comes from this tribe.⁴⁸

The Deleterious Effects of Tribalism in the Air Force

Thomas Ehrhard argues that “the culture of the Air Force has always centered around the man, the machine, and the choreography of flight—the combat pilot, the aircraft, and the aviation meta-system.”⁴⁹ Accordingly, since it was the pilot who assumed the risk in combat, he became (and remains) the service’s natural leader. This is

⁴⁴ Currently two out of 14 Generals (14 percent) and one out of 37 (3 percent) Lieutenant Generals are from the Special Operations tribe.

⁴⁵ This tribe does not fly aircraft and is composed of security forces (31xx), civil engineering (32xx), communications (33xx), services (34xx), and logistics (21xx).

⁴⁶ An “operator” in the USAF is a coveted title due to its exclusivity. Currently, only pilots (11xx), navigators (12xx), and space, missile, and air battle managers (13xx) can claim this honor. Every other AFSC in the USAF is considered to be a non-operator. A simple artifact to delineate an operator from a non-operator is that operators are authorized to wear flight suits as the uniform of the day.

⁴⁷ Information derived from the AFPC official website:

<http://www.afpc.randolph.af.mil/library/airforcepersonnelstatistics.asp>.

⁴⁸ Information on general officer biographies is derived from USAF official biographies site at: <http://www.af.mil/information/bios/results.asp>.

⁴⁹ Ehrhard, “Unmanned Aerial Vehicles in the United States Armed Services,” 97.

evident in the senior leadership positions of the Air Force where 13 out of 14 (93 percent) full generals and 25 out of 37 (68 percent) lieutenant generals are pilots, even though it comprises only 28 percent of the officer corps.⁵⁰ But with the changing character of warfare in the twenty-first century, the aforementioned non-combat tribes have become increasingly important to the Air Force's warfighting functions. But in the absence of a strong, overarching unifying mission or vision that recognizes and rewards the contributions of all its tribes, individual loyalty has been devoted to tribal functions, technologies, and occupations instead.

The danger of tribalism within the Air Force is that each functional specialization possesses extremely well-defined subcultures that are not inclined to mesh well with each other in the absence of a common underlying assumption. This situation is depicted in Figure 9. Additional divisions exist within each subculture, however. Rather than

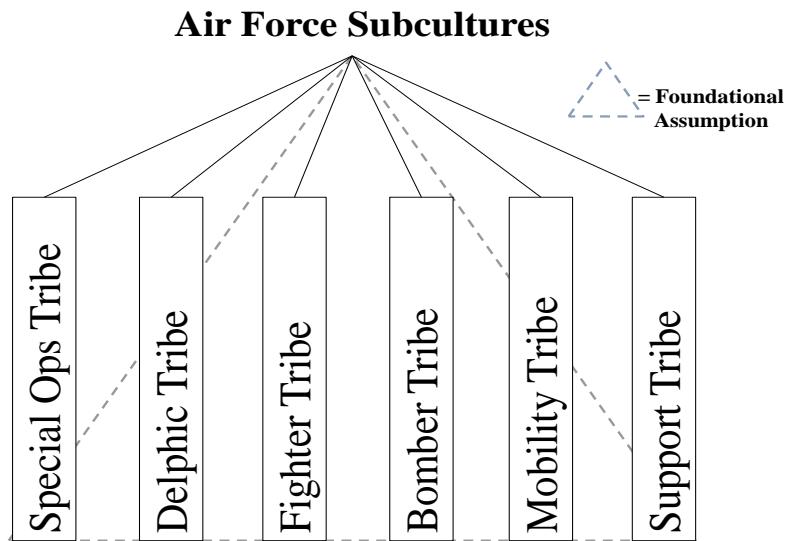


Figure 9. Organizational Disruption Resulting From Lack of an Accepted Common Underlying Assumption

Source: Author's Original Work

simply differentiating between broad categories such as pilots and navigators, between intelligence and support officers, sharper divisions exist between different types of pilots,

⁵⁰ Currently, the Air Force has 13,706 pilots out of 49,007 total officers. AFPCs data is limited to O-1 through O-5 for rated officers and is current as of March 31, 2010 and was found at AFPC's official website: <http://www.afpc.randolph.af.mil/library/airforcepersonnelstatistics.asp>. Information for General Officers derived from USAF official biographies site at: <http://www.af.mil/information/bios/results.asp>.

different types of support officers, and so on. Organizational cohesion is further reduced and intra-tribal divisions become even sharper during times of budget reductions when the intra-tribal factions of each subculture “circles its wagons” to protect its priorities.⁵¹ The net effect of this protectionism undermines the warfighting effectiveness of the Air Force because the “minority viewpoint” of the lesser tribes is frequently overridden by the self-serving interests of the monarchic tribe. This tendency was apparent during the reigns of both the bomber and fighter generals when procurement decisions were primarily based on maintaining ones tribal strength. This combination of single-tribe dominance and fractured tribal and intra-tribal allegiances only serves to create a witch’s brew of dysfunctionality.

Builder and other commentators on Air Force culture have noted that the service lacks a cohesiveness organizational culture due to member over-identification with tribal technologies. This over-identification inhibits the evolution of a universal institutional identity due to what is sometimes referred to as the “flight suit” identity. In the Air Force, fliers are fliers (operators), and support is support (non-operators), and never the two shall meet. The same can be said about pilots in general and almost any other specialty in the Air Force. Even among pilots, notable elitism is exhibited among the various groups depending on what type of fighter, bomber, or transport aircraft a pilot flies. Within this extremely competitive subculture, there always exists a “first among equals.” Since 1976, this person has been the single-seat F-15 pilot. The F-15C is a twin-engine, all-weather fighter designed to gain and maintain air superiority in aerial combat. Prior to acquisition of the F-22, the F-15C was considered to be the premier fighter in the Air Force inventory. The proof that a pilot “first among equals” exists is captured best when one considers Lieutenant General Michael C. Short’s observation:

Since the time of Charlie Gabriel to the time of Buzz Mosley, the Air Force has had a middle aged fighter pilot as its Chief. The leadership pool has been further narrowed since 1998 when the Chiefs were middle aged fighter pilots who had graduated from Fighter Weapons School. The gene pool was narrowed again under Chief Jumper and Chief Mosley as we scoped the job down to middle aged fighter pilots who viewed themselves as primarily F-15 pilots who had graduated from Fighter Weapons School. I would argue that choosing leaders from an increasingly narrow pool results in leadership that sees challenges not with a fresh view, but in the

⁵¹ Builder, *The Icarus Syndrome*, 180.

same relatively narrow view as did the men who preceded them. Additionally the signal to the force is unmistakable—if you do not fit our incredibly narrow mold you have no chance to rise to senior leadership positions. A system that brings Air Force leaders schooled in the same narrow culture year after year and increasingly limits the candidates for leadership cannot be healthy in either the short or long term.⁵²

The maintenance of elitist attitudes among the haves and have-nots is further reinforced in the tribal enculturation process that occurs within the Air Force.⁵³ Worden argues (and most sociologists would agree) that the first ten years of an individual's membership in any organization are the most formative. Impressions and paradigms are created upon entrance into the organization that will carry an officer forward for the remainder of his/her career. Worden asserts that the underlying assumptions that the new officer adopts will be that of the tribal “warfighting community” to which he/she belongs, even if those assumptions conflict with those officially held by the organization.

Because Air Force subculture identity rests primarily on the technology each tribe exploits, the lack of a universal officer enculturation process established optimal conditions for tribalism to continue within the service prior to 1998. Charles Moskos and Frank Wood agreed with this assessment and stated that “because of their extensive focus on and use of technology, the Air Force and the Air Force officer corps in particular tend to be most susceptible [of all the services to experience occupationalism] and a diffuse sense of organizational purpose.”⁵⁴ Drawing officers from three separate sources, the Air Force Academy, the Reserve Officers Training Corps (ROTC) program, and Officer Training School (OTS), it fell upon initial specialty training prior to 1998 to serve as the source of military indoctrination for Air Force officers.⁵⁵ For pilots, tribal acculturation

⁵² LTG (Ret) Michael C. Short, e-mail to the author, 27 May 2010.

⁵³ “*Enculturation* is the process by which a person learns the requirements of the culture by which he or she is surrounded, and acquires values and behaviors that are appropriate or necessary in that culture.” Definition derived from John W. Berry, “Acculturation,” in *Handbook of Socialization: Theory and Research*, ed. Joan E. Grusec et al. (New York, NY: Guilford Publications Incorporated, 2007), 547.

⁵⁴ Charles C. Moskos and Frank R. Wood, “Institution Building in an Occupational World,” in *The Military: More Than Just a Job?*, ed. Charles C. Moskos and Frank R. Wood, (McLean, VA: Pergamon-Brassey’s International Defense Publishers, 1986), 282.

⁵⁵ Although the Army and Navy also draw their officer corps from three separate commissioning sources (Service Academy, Officer Candidate School (OCS) and ROTC), each service’s initial officer training following commissioning is specifically designed not only to teach an officer his/her military occupational specialty (MOS), but also how that MOS fits into the services overarching mission. In doing so, an Army officer and a Navy officer leaves MOS training with a stronger universal identity than that held by an Air Force officer. For the Army, MOS training and enculturation occurs in the 18.5 week Basic Officer

occurred in undergraduate and advanced pilot training. For the non-pilots, their technical training schools produced a similar level of tribal allegiance.⁵⁶ For both, the focus was not on the institutional values of the service or on how each specialty coalesced with the other as part of a combined Air Force team, but instead centered on mastering the technology to be exploited. However, in 1998, the USAF realized the negative effects that tribalism was having on the organization's warfighting potential and attempted to counter this trend by founding the Air and Space Basic Course (ASBC). The ASBC was

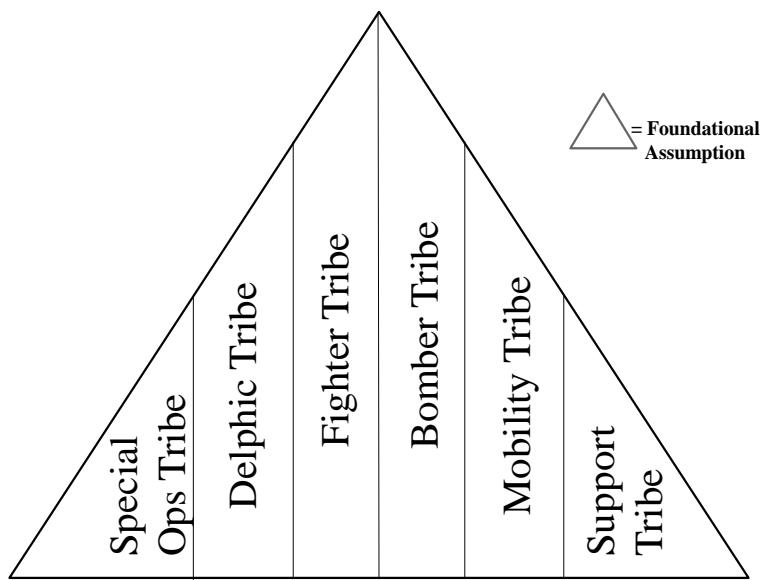


Figure 10. Binding Effect of Common Underlying Assumption in the Air Force

Source: Author's Original Work

Leadership Course (BOLC) B. BOLC B training occurs immediately after BOLC A (commissioning source training). BOLC B is a new program initiated in 2010 and is a consolidation of the former seven-week BOLC Phase II and the 15-week BOLC Phase III courses. In BOLC II, newly commissioned second lieutenants learned 55 basic soldiering skills designed to "develop and produce adaptive officers...that share a common bond with their combined arms peers." BOLC III training focused on a specific MOS and taught second lieutenants how to master his/her respective specialty (e.g. armor, infantry, field artillery, signal corps) as part of a combined arms team. Information derived from: Jeff Crawley, "BOLC B Will Benefit New Officers," *Army News Service*, 12 February 2010, <http://www.military.com/news/article/army-news/bolc-b-will-benefit-new-officers.html> (accessed 6 May 2010), and from LTC Mike Fife (USA), interview by the author, 7 May 2010. For the Navy, MOS training and enculturation following commissioning occurs at the 17-week Surface Warfare Officer school, 62-week Subsurface Warfare Officer school, or in the 6-12 month aircraft specific advanced flight training following UPT. In all three of these schools, naval officers learn the role his/her MOS plays in supporting the Carrier Strike Group (CSG). Information derived from: Cdr Phil Heberer (USN), interview by the author, 7 May 2010.

⁵⁶Every USAF officer became a specialist; the results of a 1959 AFROTC study showed "increasingly, officers identified themselves as "navigators" or "engineers" perhaps as "Air Force navigators" or "Air Force engineers" rather than as "Air Force officers." Vance O. Mitchell, *Air Force Officers: Personnel Policy Development, 1944-1974* (Washington, DC: Air Force History and Museums Program, 1996), 285.

designed to build a common institutional identity for all Air Force officers before the start of specialized training as depicted in Figure 10.⁵⁷ The ASBC was modeled on the Marine Corps foundational officer indoctrination institution, The Basic School (TBS). At TBS, every second lieutenant regardless of background goes through the same six-month infantry course designed to inculcate a universal identity that “every Marine is a rifleman.” In so doing, a bonding and esprit de corps develops in which every Marine officer knows “that any Marine would die for me and me for him.”

The ASBC was an important first step for the Air Force to take in its attempt to combat tribalism. But establishing lasting underlying assumptions in a six-week course is difficult. In order for the message to become permanent, the underlying assumptions advocated at the ASBC must be continually reinforced throughout the formative first ten years of an officer’s career. This can occur in one of three manners: either through reinforcement at the Squadron Officer School, through equitable promotion rates, or by an individual’s perceived command opportunities above the wing level. These topics will be investigated in the following chapter.

Summary

This chapter has examined the dysfunctional role that tribalism plays in hindering adoption of a universal institutional identity in the Air Force. In this investigation, we have learned that in a service enamored with technology, tribal affiliation aligns with the technology each sub-culture masters in the performance of its assigned roles and missions. It has also revealed how the changing external security environment and the changing character of war generated by new technologies have empowered the “rising”

⁵⁷ Lt. Gen Michael D. McGinty, quoted by Julie Bird in “The Chief’s Vision.” *Air Force Times*, 2 December 1996, 12. Air and Space Basic Course (ASBC) was conceived by Air Force Chief of Staff General Ronald Fogleman and launched in 1998. The six-week course is mandatory for all newly commissioned second lieutenants and was created to teach new officers about the Air Force “family business” as codified in the service’s basic doctrine. Its stated mission is “To inspire new USAF officers to comprehend their roles as Airmen who understand and live by USAF core values, can articulate and advocate what Air, Space, and Cyberspace power brings to the fight, and are dedicated as warriors in the world’s most respected Air, Space, and Cyberspace Force.” The four goals ASBC attempts to accomplish through shared experiences are: (1) Comprehend Air, Space, and Cyberspace operations as the primary means for effectively employing Air, Space, and Cyberspace power as a part of the joint warfighting team; (2) Comprehend Air Force history, doctrine, and distinctive capabilities as the foundation for the effective employment of Air, Space, and Cyberspace power; (3) Embrace the profession of arms by applying the Air Force core values with the heart, mind, and body of an Air, Space, and Cyberspace warrior; and (4) Value the expeditionary Air, Space, and Cyberspace force as a team and the role of Air Force officers in leading within the team. Information derived from the Air University website located at:

<http://www.au.af.mil/au/soc/asbc.html> (accessed 01 April 2010).

delphic, mobility, and special operations tribes. No longer is the competition for organizational dominance limited to combat pilots of the bomber and fighter tribes. Rather, the increasing importance of other tribes has created the need for the Air Force to incorporate them into an all-inclusive cultural identity.

We have also learned that the biggest hazard of tribalism is monarchic “group think.” However, this investigation has also shown that tribal conflict, if managed well, can guard against *group think* and be harnessed for good to increase an organization’s innovation, objectivity, and analytical ability. We have also seen the difficulties that narrowly focused senior leaders experience when transitioning from a tribal role to a senior leadership position that spans several tribes. This chapter has also revealed that a closed system organization with a centralized subgroup power structure that disproportionately promotes dominant tribe members to senior leadership positions naturally leads to development of a monarchic tribe.

We have also seen the method used to solidify control over an organization when the former dominant tribe falls from power. The tribe out of favor is taken over by representatives of the dominant tribe, which then consolidates its tribal hold on the institution by producing new career paths to grow its own members into future leadership positions. This chapter has also shown that unbalanced tribal dominance breeds discontent among the remaining tribes that have been denigrated and effectively excluded from any hope of senior leadership positions. The next chapter will investigate how this unbalanced tribal domination is maintained by briefly examining the enculturation training, organizational structure, and promotion system of the Air Force. Only by thoroughly understanding these issues will Air Force leadership be able to effect meaningful and lasting organizational cultural change.

Chapter 4

The Roadblocks to Institutional Identity Change in the Air Force

Reality is what we take to be true. What we take to be true is what we believe. What we believe is based upon our perceptions. What we perceive depends upon what we look for. What we look for depends upon what we think. What we think depends upon what we perceive. What we perceive determines what we believe. What we believe determines what we take to be true. What we take to be true is our reality.

-- Gary Zukav

Zukav's statement explains the adage that "Perception is Reality." Accordingly, the main roadblock to effecting a lasting change in Air Force institutional identity is based largely on how the lesser tribes perceive the organization. If lesser tribes perceive they are being appropriately rewarded and recognized, it will be easier for them to discard tribal loyalties and accept the organization's underlying assumptions. There are three factors which influence an Airman's acceptance of the Air Force's organizational culture. These factors are enculturation training of Air Force values, the Air Force's organizational structure, and its promotion and assignment system for general officers. This chapter investigates these issues.

Enculturation Training in the Air Force

Before discussing enculturation training after the ASBC, it is important to note that this school was in part created to address the "organizational-culture" problem in the Air Force.¹ "Designed to inculcate an "Airman First" attitude—the idea that Air Force

¹ Dr. Matthew C. Stafford, Chief Academic Officer, Squadron Officer College, Maxwell AFB, AL, e-mail to the author, 7 May 2010. Stafford states that the creation of ASBC to address an "organizational culture" problem is more complicated than its "in part" creation implies. In response to the rapid pace of change in the nature of military conflict, as well as to criticism of the organization from both inside and outside the service, Air Force leaders at the fall 1996 CORONA Conference recognized the need for a renewed vision of the Air Force's mission and a clearer articulation of institutional values and core competencies. "The CORONA '96 addressed a perceived shortcoming in the Air Force officer corps – namely that they weren't "Airman" so much as they were adherents of their individual specialties. The CORONA determined that what was needed was a "common bonding experience," in which officers would learn to become "Airmen first." Specifically, they addressed these five shortcomings in the officer corps, all of which would be reconciled by this "Airmen first" mentality: (1)Lack of understanding of AF Core Values; (2) Lack of appreciation for AF distinctive capabilities--*what the Air Force brings to the fight*; (3) Inability to advocate how 21st-century air & space power can contribute to success in joint military ops; (4) Existence of

officers are Airmen first and specialists second,” the six-week course covers five program learning areas.² These areas are Profession of Arms, Warfare Studies, Leadership Studies, International Security Studies, and Communication Studies.³ Comprising 159 contact hours of instruction, the ASBC’s curriculum is far shorter than its model, “The Basic School” (TBS) of the Marine Corps.⁴ At TBS, every Marine officer receives in-depth exposure to every aspect of Marine Corps operations during 1,681 instructional hours over a 26-week period.⁵ This training time does not include what a Marine also receives in follow-on specialization training.

According to Dr. Matthew C. Stafford, Chief Academic Officer, Squadron Officer College, despite the best efforts of the ASBC, it is struggling to accomplish its stated purpose, causing frustration among senior Air Force leaders because its graduates remain unable to articulate the role of air, space and cyberspace power.⁶ Furthermore, Stafford sees this problem worsening.⁷ To counter this adverse trend, the ASBC has introduced a week-long series of doctrinal immersion lessons, bolstered by two electronic simulations that reinforce learning in these important areas. Stafford admits, however, that much more must be done following the ASBC if lasting cultural change is to occur.⁸

careerism—“*stove piping*”—among officers from different commissioning sources and AFSCs; and (5) Misunderstanding of importance of *teamwork* within the American military.” Stafford, e-mail to the author, 24 May 2010.

² Stafford, e-mail, 7 May 2010. ASBC teaches five large classes per FY and breaks each class into two overlapping parts with different start and end dates. These phased classes improve attendance and manage lodging issues.

³ See Appendix A for a detailed description of these five program learning areas. Manual for Air and Space Basic Course (MASBC) 001, *Air & Space Basic Course Syllabus*, 4 March 2010, 6.

⁴ MASBC 001, *Air & Space Basic Course Syllabus*, 10-12.

⁵ Lt Col Stephen J. Lightfoot (Executive Officer, The Basic School, Quantico Marine Corps Base, VA), telephone interview by the author, 04 May 2010.

⁶ Stafford, e-mail, 7 May 2010. However, Stafford now feels that this frustration is misplaced because he believes that the “ASBC is finally doing exactly what it was intended to do. It will be over a decade, however, before today’s ASBC graduates are in a position to make a major difference in either our own Senior Staff’s or our Sister Services’ opinion of Airmen.” He qualifies this opinion by asserting that “Much has changed since *year one*. Arguably the school was largely out of touch with Air Force needs through 2007. In 2007 the then CSAF pushed for fairly radical revisions in the course content, however, these were limited to what one would typically refer to as the “training” portion of the curriculum – expeditionary skills and interaction with Non-Commissioned Officers (NCO) from the NCO Academy. In 2009, we launched a revision of the academic curriculum and it too is now in line with all higher headquarters-levied learning requirements.” Stafford, e-mail, 24 May 2010

⁷ Stafford, e-mail, 7 May 2010.

⁸ Stafford made the point to accentuate “following ASBC” as being the key point to this statement. He feels that ASBC is doing what it can and should, but more needs to be done later in an officer’s career. Stafford, e-mail, 24 May 2010.

Two former commanders of the ASBC agree with Stafford. Dr. (Col, Ret.) Stefan Eisen developed the school's curriculum and was its first commander.⁹ He acknowledges that the identity crisis and tribalism that the Air Force has been struggling with for the past 30 years cannot be rectified through a short six-week course.¹⁰ He advocates developing an "ASBC-on steroids," that more closely approximates the length of the Marine Corps' TBS.¹¹ Although Eisen understands that this will be expensive in both time and money, he argues that a five-month course is needed to foster a stronger union in the Air Force.¹² Eisen feels that this benefit alone is worth the expense in both time and money because it can improve the warfighting capabilities of the service.¹³

Col (Ret) Richard "Kemo" Perry agrees that the ASBC is not doing enough to combat tribalism in the Air Force.¹⁴ Conceding that the Air Force lacks a good organizational identity, Perry sees tribal affiliation based on technological exploitation as unhealthy.¹⁵ But, he acknowledges that the service has no choice but to organize as it does.¹⁶ Thus, because tribal technical boundaries are always going to exist, Perry feels that it is up to the Air Force's Professional Military Education (PME) program to promulgate a universal identity that crosses all domains and subcultures.¹⁷ However, Perry believes that the current Air Force approach to accomplishing this task is lacking.¹⁸ He feels that one of the difficulties lies not in the content of ASBC's curriculum or length, but in its placement in an officer's enculturation.¹⁹ He argues that because the ASBC is placed between an officer's accession and follow-on training, the officer has a

⁹ Dr. (Col-Ret.) Stefan Eisen, interview by the author, 7 December 2009. Dr. Eisen is the current Director of the Air Force Negotiations Center of Excellence. In 1997, Eisen was tasked by then Air Force Chief of Staff General Fogelman to develop the curriculum for the ASBC. After the program was approved by Fogelman, Eisen was made the school's first commander. After leaving ASBC, he also developed a new level of Air Force Professional Military Education while serving as commander of Air Force Basic Military Training (BMT) when he created Warrior Week, where recruits are introduced to and experience how the Air and Space Expeditionary Task Force (AETF) operates. This change was the first one made to Air Force BMT in over 50 years.

¹⁰ Eisen, interview.

¹¹ Eisen, interview.

¹² Eisen, interview.

¹³ Eisen, interview.

¹⁴ Col (Ret) Richard "Kemo" Perry, interview by the author, 7 May 2010. Perry was the commander of the ASBC in 2004 and was an F-15E pilot who served in the Air Force for 22-years.

¹⁵ Perry, interview.

¹⁶ Perry, interview.

¹⁷ Perry, interview.

¹⁸ Perry, interview.

¹⁹ Perry, interview.

tendency to be overly focused on future specialization training at the expense of the present.²⁰ In this regard, the ASBC training may not have staying power because officers tend to simply go through the motions until graduation.²¹ In addition, Perry also feels that the ASBC is less focused on PME and more focused on serving as the annual training opportunity for the service's ten Major Commands (MAJCOM).²² Because both run counter to the ASBC's stated purpose, Perry feels that the Squadron Officer School (SOS) is a better place for comprehensive institutional enculturation training to occur.²³

Stafford disagrees with Perry's assessment that the ASBC is overly focused on serving as an annual training opportunity for the MAJCOMs.²⁴ In 2007, the ASBC underwent a major revision in its expeditionary-skills training. Called "re-tool," the school moved out of the classroom and into two simulated deployments and adopted a multi-day "combined-operations" event with students from the Senior Non-Commissioned Officer (NCO) Academy. In 2009, a second "overhaul" was launched to refocus the ASBC on its higher headquarters-levied learning requirements outlined in Appendix A, bringing the ASBC back to its PME roots while simultaneously moving it from the one-way communication and multiple-choice tests (mostly knowledge-level instruction and evaluation) to a graduate-level educational experience. Called "re-school," this second phase in ASBC's transformation resulted in an educational opportunity that bears little resemblance to the program as it existed prior to 2009 when Eisen or Perry were the commanders of the ASBC.

The second opportunity for Airmen to receive universal enculturation training is at the SOS, the second resident Air Force PME course. The SOS conducts seven classes a year with a class size of approximately 450 students. The purpose of this five-week course is to allow captains with four-to-seven years of commissioned service to step out of their technical specialties and to broaden their focus on leadership. With a mission to "Educate, motivate, and mentor Captains as current and future Air Force leaders," the 98.5 instructional hour SOS curriculum consists of six study modules that re-explore the

²⁰ Perry, interview.

²¹ Perry, interview.

²² Perry, interview. Stafford contends that while this may have been true when Perry was ASBC's commander prior to 2009, the course is now directly focused on the learning requirements levied by Higher Headquarters. Stafford, e-mail, 24 May 2010.

²³ Perry, interview.

²⁴ The remainder of this paragraph is based on Stafford, e-mail to the author, 25 May 2010.

five program areas taught at the ASBC.²⁵ The six study modules are: (1) Essential Skills, The Company Grade Officer (CGO); (2) Introspection and Self-Awareness, The CGO in the Work Environment; (3) Organizational and Team Leadership, The CGO as a Member of the USAF; (4) The Family Business, The CGO as a Component of the U.S. Military; (5) The Joint Perspective; and (6) The CGO and Future Challenges: Strategic and Global Perspectives.²⁶ Primarily designed to be a leadership and team-building school, the topics of "Air Force education" and joint education of the five core-curriculum areas described in Appendix A are secondary in importance to the leadership development curriculum.²⁷ Accordingly, very little institutional enculturation training occurs.

Perry believes that the training focus of SOS is mislaid and asks, "Why does a four-to-seven year Captain require leadership education at this stage in his/her career?"²⁸ He feels that this type of education should have already occurred at both the officer's accession source and the ASBC.²⁹ Therefore, Perry argues that the leadership education of SOS should be reversed with the institutional enculturation of training of ASBC.³⁰ Perry further states that if the Air Force took this single step, it would see immediate dividends and be better postured to combat its tribal predilections.³¹

Perry perceives that neither the ASBC nor the SOS is doing enough to educate CGO's of the complementary roles that air, space, and cyberspace play in the Air Force.³² Fully aware that Air Command and Staff College (ACSC) is not the optimal place to make up for the enculturation shortfalls at CGO-level schools, ACSC is nevertheless

²⁵ See Appendix A for a detailed description of these five program learning areas. Manual for Squadron Officer School (MSOS) 001, *Squadron Officer School Residence Course Syllabus*, Draft, 1 June 2010, 5.

²⁶ MSOS 001, *Squadron Officer School Residence Course Syllabus*, 5.

²⁷ Stafford , e-mail, 07 May 2010.

²⁸ Perry, interview. Stafford disagrees with Perry's assessment and feels that conducting leadership education at the SOS is the answer because it gives these officers the tools they need to lead earlier in their careers. He states: "The new SOS is based on executive-leadership seminars similar to those to which the Air Force sends its colonels and general officers. While extraordinarily valuable, many of these senior officers exit these seminars with the question, "why did the Air Force wait so late in my career to give me these tools?" Stafford, e-mail, 24 May 2010.

²⁹ Perry, interview.

³⁰ Perry, interview.

³¹ Perry, interview.

³² Perry, interview. Stafford finds Perry's perception of the ASBC program troubling from a person who has been disconnected from the program for many years (2004) and may not have an accurate knowledge-base of the current program on which to make this statement. Accordingly, Stafford does not view Perry's viewpoint as being fair or accurate. Stafford, e-mail, 25 May 2010.

beginning a pilot program to train select Airmen as Cross Domain Operators (CDOs).³³ The Beta test of the CDO curriculum will start in Academic Year (AY) 2011 with an initial class of 24 Air Force majors.³⁴ The CDO course will devote six semester hours to exploring how various technologies are exploited in the joint air, space, and cyber domains.³⁵ The CDO course will conclude with a comprehensive wargame to evaluate each student's progress.³⁶ Perry is aware that the CDO program has some deficiencies—it is a small program that he feels is too tactically focused.³⁷ Nevertheless, it is his belief that this small cadre of CDOs, upon leaving ACSC, will be able to appreciate and articulate each tribe's contribution in the joint Air Force fight.³⁸ Perry believes that the interaction of these CDOs with thousands of Airmen over each CDO's career will prove beneficial in the Air Force's attempt to effect lasting cultural change.³⁹

During the course of the interviews, both Eisen and Perry expressed admiration that the Navy has been able to combat tribalism's adverse effects without having to resort to an ASBC or SOS-type equivalent training for its officers. The Navy's success in doing so rests largely on the prescience of Admiral Elmo R. Zumwalt, the CNO from 1970-1974. Zumwalt recognized the danger that technological advancements posed in undermining the strong universal institutional identity of his service, and understood that the technologically complicated carrier (and the similarly sophisticated nuclear submarine) required intensive specialization of Navy personnel.⁴⁰ Junior naval officers were thus predisposed to adopt an operationally narrow focus and be prone to "unionize" in exclusive tribal communities.⁴¹ Afraid that these young officers would view the Navy primarily in terms of their occupation's attributes instead of taking the Navy-wide mission-oriented perspective held by Navy senior leadership, Zumwalt combated this

³³ Perry acknowledges that ACSC is not the optimum level of PME to begin this training. He understands that by the time the 10 to 14-year service Majors arrive at ACSC, they are outside the optimum ten-year period that Worden (and sociologists) identify as being the most formative years to imprint a universal institutional identity in an officer. Perry, interview.

³⁴ Perry, interview.

³⁵ The four phases of the CDO curriculum are: (1) Joint Air Domain, (2) Space Domain, (3) Cyber Domain, and (4) Domain integration of joint air, space, and cyberspace. Perry, interview.

³⁶ Perry, interview.

³⁷ Perry, interview.

³⁸ Perry, interview.

³⁹ Perry, interview.

⁴⁰ George W. Baer, *One Hundred Years of Sea Power: The U.S. Navy, 1890-1990*, (Palo Alto, CA: Stanford University Press, 1994), 403.

⁴¹ Baer, *One Hundred Years of Sea Power*, 403.

tendency not through PME, but by making cross-pollination between line communities a prerequisite for promotion above the rank of O-4.⁴²

By cross-pollinating its officers, the Navy has been successful in maintaining the common seafaring identification and love of the sea that Builder identified as being the glue that holds the service's tribal subcultures together. Two naval officers interviewed for this study, Commanders Phil Heberer and Chris Stamper, agree that cross-pollination is more effective than PME in preventing tribalism.⁴³ In fact, both stated that because cross-pollination is held in such high esteem by the Navy for promotion, in-residence PME is considered secondary in importance to the cross-domain experience garnered at sea.⁴⁴ Whether one is an aviation, surface, or subsurface officer, all are expected to maximize their exposure to the sea. Both Heberer and Stamper stated that this was doubly important for aviators. Because the aviation community is not solely seafaring in nature, each officer must perform a two-to-three year disassociated sea tour outside his/her community to be competitive for promotion.⁴⁵ If an aviator fails to gain his/her "underway qualification" on a disassociated sea tour, the chances for promotion to O-5 are negligible.⁴⁶

Eisen mentioned another factor that bolstered the strength of the Navy's institutional identity and weakened that of the Air Force. This is the different manner in which the two services exploit Schein's first-tier *level of artifacts* for service members attending PME.⁴⁷ At both the SOS and ACSC, the Air Force's practice of allowing the "operators" (or rated) to wear flight suits while the non-operators (or unrated) wear the Airman Battle Uniform (ABU) impedes the universal institutional enculturation process

⁴² Baer, *One Hundred Years of Sea Power*, 403.

⁴³ CDR Phil Heberer and CDR Chris Stamper, interview by the author, 07 May 2010. CDR Heberer is a P-3 Naval Flight Officer and a 23-year Active Duty naval officer. CDR Stamper is an H-2/H-60 pilot and a 21-year Active Duty naval officer.

⁴⁴ Interestingly, the Navy places such a high regard on fleet experience that it is a well-known fact that more than one in-residence PME tour is considered to be an adverse mark for promotion purposes. Heberer and Stamper, interview.

⁴⁵ Stamper, interview.

⁴⁶ The "underway qualification" is an intensive ship-board training requirement that has to be successfully completed in order to serve as the Officer of the Deck (underway). As Officer of the Deck (underway), the ship's captain authorizes that person to serve as the conning officer when the captain is not on the bridge. In effect, the captain trusts that individual to steer the ship and make decision in his/her absence. Stamper did state that once this underway qualification was attained, the two to three-year tour was normally curtailed and the officer returned to his/her community. Stamper, interview.

⁴⁷ Eisen, interview.

because it maintains tribal separations.⁴⁸ To Eisen, this “flight suit” identity places a barrier between the haves and have-nots by reinforcing the belief in Airmen that the operators are the “elite.”⁴⁹ This practice of allowing the wearing of two distinct uniforms undermines organizational cohesion.⁵⁰ The Navy takes the opposite approach.⁵¹ At the Naval War College (NWC), every student wears civilian attire instead of a uniform.⁵² This is done to break down not only the boundaries created by tribalism, but also those created by differences in rank.⁵³ At NWC, every student is perceived and treated without regard to community or rank. The Navy feels that this practice promotes better cross-pollination among subcultures by increasing interpersonal interaction between the students.⁵⁴ This academic cross-pollination is designed to reinforce the benefits derived from disassociated sea tours in strengthening the Navy’s already strong institutional identity.⁵⁵

Although Eisen sees merit in the Navy’s method of enculturation, he states that the Navy possesses one important advantage over the Air Force. It is easier for the Navy to gain acceptance of a universal underlying assumption because of the undeniable fact that the Navy’s success in warfare revolves around protecting the aircraft carrier. Because the surface, submarine, and aviation elements deploy together as part of the carrier battle-group, the carrier becomes the lifeline that must be saved at all costs.⁵⁶ Thus, from the beginning of a Sailor’s basic military training, he/she learns that it takes a team to run (and save) the ship.⁵⁷ For if the entire Navy team cannot save the ship, the warfighting

⁴⁸ An “operator” in the USAF is a coveted title due to its exclusivity. Currently, only pilots (11xx), navigators (12xx), and space, missile, and air battle managers (13xx) can claim this honor. Every other AFSC in the USAF is considered to be a non-operator. Eisen, interview.

⁴⁹ Eisen, interview.

⁵⁰ Eisen, interview.

⁵¹ The other two services, the Army and Marine Corps take a slightly different approach from that practiced by the Navy and Air Force. More in-line with the Navy’s philosophy of promoting esprit de corps within the service, both the Army and Marine Corps require all students to wear the same uniform while attending PME. For the Army, it is the Army Combat Uniform (ACU); for the Marine Corps, it is the MARine PATtern (MARPAT) uniform. Information on Army uniform requirements derived from Fife, interview.

⁵² Stamper, interview. “Except for formal ceremonies, this is also true of the Army War College. I’m a graduate of that program and saw this first-hand.” Stafford, e-mail to the author, 24 May 2010.

⁵³ Stamper, interview.

⁵⁴ Stamper, interview.

⁵⁵ Stamper, interview.

⁵⁶ Eisen, interview.

⁵⁷ Eisen, interview.

power of the naval air arm (and pilot) cease to exist.⁵⁸ Although Eisen acknowledges that it also takes a cohesive multi-tribal team to run an airfield, it is much harder for the Air Force to replicate the urgency of a “save the airfield” exercise because it has the ability to operate from multiple different airfields farther from harm’s way.⁵⁹ This reality, coupled with the ability of certain tribes to operate from geographically far-removed areas using aerial refueling and reach forward-reach back technology makes the Air Force’s task of garnering universal acceptance of a clearly defined danger and “rallying cry” more difficult.⁶⁰

Regardless of the etiology of the Air Force’s difficulties, all individuals interviewed for this study agree that the PME program being used to combat tribalism is failing in its mission. The perceptions of Airmen who do not belong to the dominant tribe remain unchanged. Leadership opportunities and promotion above the O-6 level are seen to be much greater for those Airmen genetically blessed with the 20/20 eyesight and hand-eye coordination needed to fly fighters.⁶¹ Eisen stated this opinion best by asserting that Airmen have been enculturated to believe that “If only I had more experience flying F-15’s or F-16’s, then I too could be a better leader.”⁶² Perhaps the most insightful comments come from the observations by Stafford and Perry. Stafford states:

One could argue that the expansion of mission areas—from air; to air and space; to air, space and cyberspace; to air, space, cyberspace and nuclear (undeclared, but the Air Force is clearly heading in that direction to correct past deficiencies in this important mission area) has left many Airmen out of touch with a broad Air Force organizational culture. Instead, they have resorted to the exact behavior for which they were condemned in Builder's "Icarus Syndrome"—they have hunkered down in the comfort of their individual specialties. Air Force leaders still complain about the specialization, but at the same time fund and reinforce investments in these specializations to the detriment of the generalist approach. This is evidenced by the fact that the Air Force is making huge investments in nuclear education and training, and the creation of Global Strike Command, even while considering the elimination of the ASBC. Therefore, in my opinion, the Air Force needs to conduct something of a "cultural jihad"—a hunkering down in the faith—or in this case the culture of what it means to be an Airman and what the Air Force has delivered,

⁵⁸ Eisen, interview.

⁵⁹ Eisen, interview.

⁶⁰ Eisen, interview

⁶¹ Eisen and Perry, interview.

⁶² Eisen, interview.

can deliver, and will deliver to Joint Force commanders executing a wide variety of mission requirements.⁶³

Perry agrees and states that the Air Force's belief that "if a problem cannot be solved with technology, it can be solved with PME" is never going to resolve the service's institutional identity crisis.⁶⁴ Hard and unpopular choices must be made, choices that may involve not only altering the Air Force's organizational structure, but also changing the promotion and command processes of the service. Perry concluded that the existence of the fighter pilot mafia has been entirely unhealthy for the Air Force because it has placed a perceptual glass ceiling for advancement on the members of the lesser tribes. For that reason, Perry asserts that the Air Force has no choice but to change.⁶⁵

Organizational Structure of the Air Force

The Air Force is organizationally structured in favor of the fighter tribe. However, this structural favoritism is understandable when one considers the numbers and type of aircraft within the Air Force's inventory. Figure 11 lists aircraft number by type and shows that the fighter tribe dominates in total number of aircraft with the mobility tribe coming in a distant second.⁶⁶ Although the absolute numbers of Air Force aircraft have steadily declined since Fiscal Year (FY) 89, the percentage of aircraft distribution among the tribes has remained relatively constant.⁶⁷ Since FY89, the fighter tribe has maintained a steady 53% to 58% of the aircraft inventory, mobility (28-34%), delphic (7-10%) and bomber (6%).⁶⁸ In the future, this percentage is expected to remain relatively stable as older aircraft are refurbished rather than replaced. Of note, the only weapon systems currently being acquired in significant numbers are delphic UAVs to support on-going combat operations in both Iraq and Afghanistan.

⁶³ Stafford, e-mail, 07 May 2010.

⁶⁴ Perry, interview.

⁶⁵ Perry, interview.

⁶⁶ It should be noted that not all delphic assets are counted as aircraft (for example, satellites systems) and are therefore not included in this summation.

⁶⁷ In FY99, the Air Force had 2,893 aircraft among the four flying tribes: 1,594 fighter aircraft (55%), 909 mobility aircraft (32%), 211 delphic aircraft (7%), and 179 bomber aircraft (6%). FY99 numbers derived from: Major WM Bruce Danskine, "The Fall of The Fighter Generals: The Future of USAF Leadership" (Master's thesis, School of Advanced Airpower Studies, 2001), 107. In FY08, the Air Force had 2,652 aircraft among the four flying tribes: 1,496 fighter aircraft (56%), 711 mobility aircraft (27%), 292 delphic aircraft (11%), and 153 bomber aircraft (6%). Information derived from "The Air Force in Facts and Figures 2009 USAF Almanac" located at: http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509facts_fig.pdf.

⁶⁸ FY 89 information derived from Danskine, "The Fall of The Fighter Generals," 107.

Type of aircraft	FY02	FY03	FY04	FY05	FY06	FY07	FY08
Bomber	183	173	172	173	172	173	153
Fighter/attack	1,631	1,628	1,627	1,622	1,619	1,552	1,496
Helicopter	126	129	160	169	160	160	170
Reconnaissance/BM/C3I	143	135	132	134	137	266	292
Special Ops Forces	102	101	99	98	103	100	94
Tanker	322	325	301	285	278	277	262
Trainer	1,342	1,308	1,277	1,267	1,284	1,111	1,074
Transport	538	529	516	525	529	454	449
Total active duty	4,387	4,328	4,284	4,273	4,282	4,093	3,990
Air National Guard	1,350	1,312	1,326	1,313	1,321	1,289	1,213
AFRC	446	433	408	400	410	396	370
Total active duty, ANG, and AFRC	6,183	6,073	6,018	5,986	6,013	5,778	5,573
Total aircraft, including foreign-government-owned	6,286	6,167	6,107	6,057	6,072	5,811	5,603

Figure 11. Distribution of Air Force Aircraft

Source: 2009 USAF Almanac

Although largest in number of aircraft, the fighter tribe is not the largest demographic in the Air Force community. Of the five, the fighter tribe is third largest and lies above the special operations and bomber tribes and behind that of the support and delphic tribes. This number has remained relatively constant since FY00 when the delphic tribe comprised 19.4%, the mobility tribe comprised 9.0%, the fighter tribe comprised 6.4%, and the bomber tribe comprised 2.6% of the Air Forces total officer corps.⁶⁹ The remaining 62.6 percent of manpower fell under the support tribe. Today, the support tribe comprises 61 percent.⁷⁰

As the service's largest aircraft community, the Air Force has logically structured its organizational structure around the fighter tribe.⁷¹ In examining this structure, one must start from the top. The Air Force Chief of Staff is the Title 10 military head of the service and directs the administrative efforts of the Air Staff (A1- A9). For the operational forces, the military commanders of the Air Force's ten Major Commands (MAJCOMs) report directly to the Chief of Staff for training, organization, and equipment matters (Figure 12). From these ten MAJCOMs, the Chief of Staff designates

⁶⁹ Danskine, "The Fall of The Fighter Generals," 128.

⁷⁰ Information derived from the AFPC official website: <http://www.afpc.randolph.af.mil/library/airforcepersonnelstatistics.asp>.

⁷¹ Within the Combat Air Force (CAF) as of 10 May 2010, there were 25 fighter wings, 5 bomber wings, and 3 missile wings. Although not an all-inclusive list, these are the wings capable of kinetic delivery of ordnance and therefore considered to be the warfighting wings. Information derived from "2009 USAF Almanac" located at: http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509facts_fig.pdf and validated on the official websites of ACC, AFGSC, USAFE, and PACAF.

which Air Force personnel and resources will be provided to each respective Unified Combatant Command.

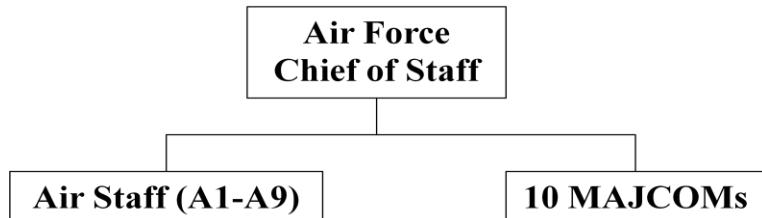


Figure 12. Air Force Organizational Structure

Source: Author's Original Work

Most units of the Air Force are assigned to one of the MAJCOMS. MAJCOMS are headed by a three-star or four-star general officer and are organized according to functionality. Directly subordinate to the MAJCOMS are two types of organizations: the numbered air forces (NAF), and the centers. The NAFs are operational echelons of the MAJCOMS to which are assigned operational units, such as wings, groups, and squadrons to perform the Air Force's Title 10 warfighting functions.⁷² NAFs are structured to perform specific operational missions and are frequently tailored according to the needs of a specific geographic region. The centers, although also operational in nature, have no direct warfighting role. Instead, they are responsible for designing, developing and delivering the aerospace weapon systems and capabilities the Air Force's warfighting components need now and in the future. (See Appendix B for a full list of the NAFs and centers assigned to each MAJCOM).

Subordinate to both the NAFs and centers are the wings. Some wings are commanded by a general officer, while others are led by a colonel. "An objective (warfighting) wing contains an operations group, which includes aircrews and intelligence units; a maintenance group, which contains maintenance squadrons; a mission support group, which includes such functions as civil engineers, logistics readiness, and security forces; and a medical group."⁷³ Below the group level are the

⁷² "The Air Force in Facts and Figures 2009 USAF Almanac", 24, http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509facts_fig.pdf.

⁷³ "The Air Force in Facts and Figures 2009 USAF Almanac", 24, http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509facts_fig.pdf.

squadrons, which may be composed of several flights and are normally commanded by a lieutenant colonel.

Within the organizational structure of the “flying” MAJCOMs, there are 21 flying wings and 5 non-flying wings in Air Combat Command (ACC), 10 flying wings and 7 non-flying wings in Air Education and Training Command (AETC), 4 space wings and 9 non-flying wings in Air Force Space Command (AFSPC), 2 flying wings, 2 flying groups, and 1 non-flying group in Air Force Special Operations Command (AFSOC), 13 flying wings and 6 non-flying wings in Air Mobility Command (AMC), 8 flying wings and 1 non-flying wing in Pacific Air Command (PACAF), 5 flying wings and 3 non-flying wings in United States Air Force in Europe (USAFE), and 3 flying wings and 3 missile wings in Air Force Global Strike Command (AFGSC).⁷⁴ In total, these eight “flying” MAJCOMs possess 62 flying wings, 32 non-flying wings, 4 space wings, 3 missile wings, 2 flying groups, and 1 non-flying group. After considering the disparity in numbers between the flying wings/groups and all others, it is apparent that pilots have a greater opportunity for command selection than their non-pilot brethren. This is made more relevant when considering command opportunities between rated and non-rated officers because the law is solidly on the side of the rated.⁷⁵

For much of the Air Force’s history, legislation restricted command of flying units to pilots, specifically Public Law 446 of the 69th Congress (1926) and Public Law 795 of the 76th Congress (1940).⁷⁶ In 1953 “other rated” officers were given the opportunity to command support organizations, and in 1956 non-rated officers were allowed to command ground-launched missile units.⁷⁷ Air battle managers have only recently been allowed to command an air warning and control system (AWACS) squadron, even though these individuals have performed an indispensable role in the

⁷⁴ This information was current as of May 2010. Information derived from “Major Commands 2009 USAF Almanac” located at: <http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509MajCom.pdf> and Air Force Global Strike Command website located at: <http://www.afgsc.af.mil>.

⁷⁵ Currently, only pilots (11xx), navigators (12xx), and space, missile, and air battle managers (13xx) are considered “rated” officers by the Air Force.

⁷⁶ Vance O. Mitchell, *Air Force Officers: Personnel Policy Development, 1944-1974* (Washington, DC: Air Force History and Museums Program, 1996), 353.

⁷⁷ Mitchell, *Air Force Officers: Personnel Policy Development*, 348.

warfighting function of the AWACS aircraft.⁷⁸ Command of a squadron or wing has always been recognized by officer promotion boards as being a critical, some would say indispensable, prerequisite for selection to general officer.⁷⁹ Based on the number of flying versus non-flying wings, the Air Force's organizational structure is canted toward the pilot. This cant is even more evident when investigating the senior leadership distribution within the Air Force.

The Air Force is notionally divided into the Combat Air Force (CAF), the Mobility Air Force (MAF), and the Support Air Force (SAF). The CAF is comprised of five MAJCOMs that perform the primary Title 10 warfighting role, and it contains all aircraft capable of kinetic delivery of ordnance.

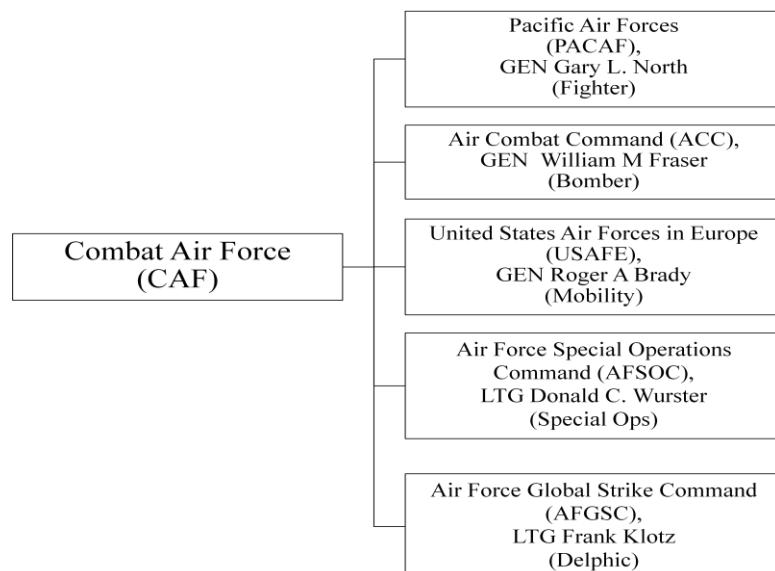


Figure 13. MAJCOMs of the Combat Air Force

Source: United States Air Force Biographies Website

⁷⁸ “Air battle managers (13Bxx) were first authorized to command flying squadrons by an interim change notification 96-1 to Air Force Instruction 51-604 (31 Dec 1996). In October 1999, air battle managers were reclassified as rated officers, thus obviating the need to update the AFI with exceptions to the existing “rated-only” policy for command of a flying squadron.” Danskine, “The Fall of The Fighter Generals: The Future of USAF Leadership,” 100.

⁷⁹ Vance Mitchell, in his study of the Air Force personnel system, claims that previous command is one of the most important discriminators for future senior leadership. Mitchell, *Air Force Officers: Personnel Policy Development*, 345.

The MAF is composed of only one MAJCOM, the Air Mobility Command (AMC). Its mission is to “Provide Global Air Mobility … Right Effects, Right Place, Right Time.”⁸⁰ All active-duty Air Force tankers and airlifters are part of the MAF.

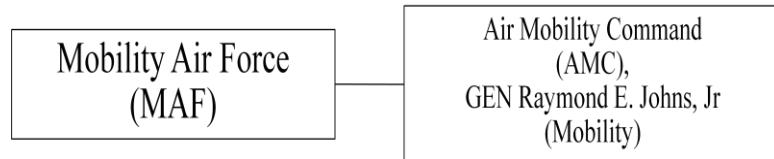


Figure 14. MAJCOMs of the Mobility Air Force

Source: United States Air Force Biographies Website

The SAF is composed of four MAJCOMs tasked with supporting the training, equipping, and sustainment of both the CAF and the MAF. The SAF contains one combat and mobility force provider in the Air Force Reserve Command (AFRC).

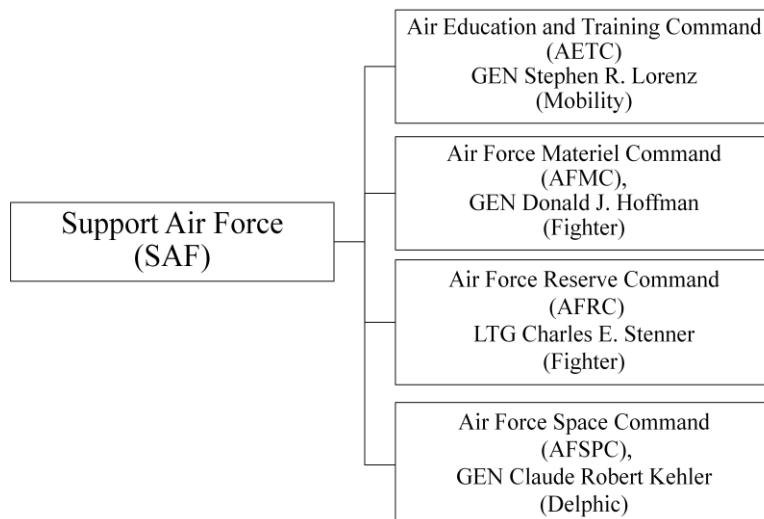


Figure 15. MAJCOMs of the Support Air Force

Source: United States Air Force Biographies Website

AFRC, although not part of the active Air Force, is a supporting unit tasked to “Provide combat-ready units and individuals for active duty whenever there are not enough trained units and people in the Regular component of the Air Force to perform any national security mission.”⁸¹

⁸⁰ Mission statement obtained from Air Mobility Command’s (AMC) official website located at: <http://www.amc.af.mil/> (accessed 07 May 2010).

⁸¹ Mission statement obtained from Air Force Reserve Command’s (AFRC) official website located at: <http://www.afrc.af.mil/index.asp> (accessed 07 May 2010).

Promotion and Assignment Opportunities in the Air Force

The lack of command opportunity for the support tribe due to the organizational structure of the CAF and MAF is reflected in the fact that even within the SAF, there are no commanders from this tribe. In fact, within the ten MAJCOMs, eight are commanded by pilots (three fighter, three mobility, one bomber, one special operations) and two are commanded by missile officers from the delphic tribe. When one also considers the Air Force senior leadership as a whole, the support tribe remains proportionally underrepresented. Of the generals who command the A-staff (Figure 16) and the MAJCOMs, Wings, and Centers (Appendix B), zero four-stars and six out of 37 (16 percent) three-stars come from this tribe.⁸² When the non-line Surgeon and Judge Advocate Generals are removed, the support tribe's representation drops to 11 percent.

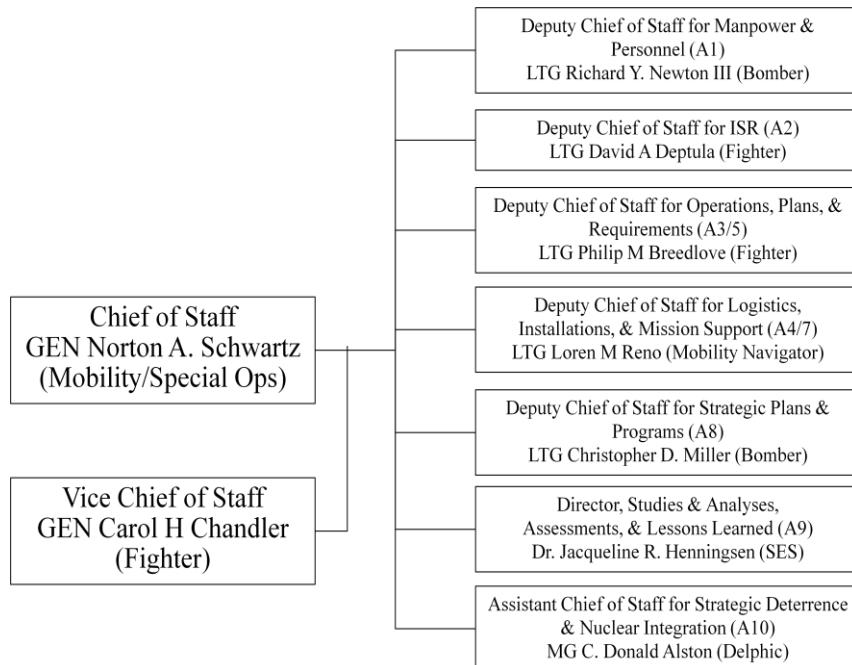


Figure 16. Air Staff (A1-A9) of the Air Force

Source: United States Air Force Biographies Website

In total, there are 51 three-star and four-star generals in the Air Force. Their tribal representations by percentage are depicted in Figures 17 and 18.

⁸² Of the 53 general officers of the A-staff, MAJCOMs, Wings, and Centers, there are 17 fighter generals, 7 bomber generals, 12 mobility generals, 7 delphic generals, 6 support generals, 6 delphic generals, 2 special operation generals, and 1 medical officer general.

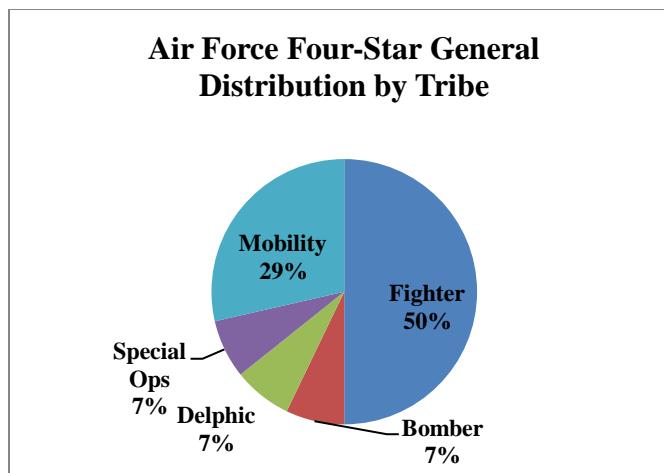


Figure 17. Subculture Distribution of Air Force Four-Star Generals

Source: *United States Air Force Biographies Website*⁸³

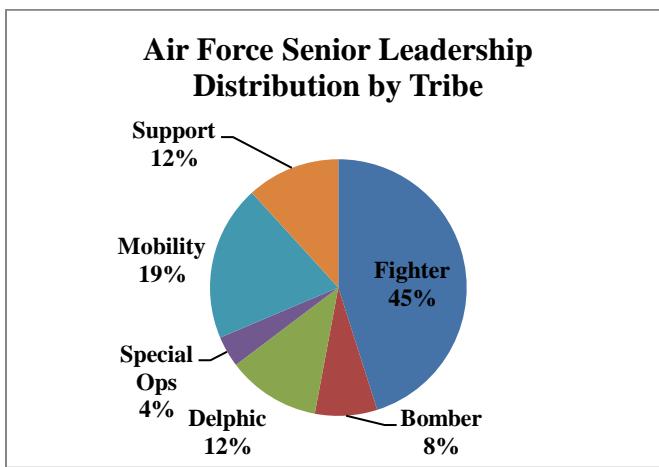


Figure 18. Subculture Distribution of Air Force Senior Leadership

Source: *United States Air Force Biographies Website*⁸⁴

The Navy, by contrast, has been able to maintain a relatively equal tribal balance among its senior leadership. A significant reason for this is that the Navy faces no legal

⁸³ As of 6 May 2010, the Air Force has 14 full generals. The tribal breakdown is: fighter (7), bomber (1), mobility (4), delphic (1), and special operations (1). The only non-pilot member is the delphic tribe member who is a Missile officer. Information derived from the Air Force official biographies site at: <http://www.af.mil/information/bios/results.asp>.

⁸⁴ As of 6 May 2010, the Air Force has 14 full generals and 37 lieutenant generals. The six support officers include one acquisition officer, one medical doctor, one judge advocate general, one communication officer, one aviation maintenance officer, and one flight test engineer. The tribal breakdown is: fighter (23), bomber (4), mobility (10), which includes one non-pilot C-130 navigator, delphic (6), and special operations (2). Information derived from the Air Force official biographies site at: <http://www.af.mil/information/bios/results.asp>.

restrictions on which subculture (of the line) can command naval fleets or task forces.⁸⁵ The MAJCOM equivalent for the Navy is the numbered fleet, and the NAF equivalent is the navy task force.⁸⁶ Lower down the hierarchical list, the wing equivalent is both the carrier strike group (CSG) for both surface warfare officers (SWOs) and aviators, and the submarine squadron for subsurface warfare officers. Organized around the numbered fleet, this organization is the Navy's force provider. The Navy has six active operational numbered fleets and one non-operational numbered fleet; all are led by a vice admiral. These seven fleets are the 2nd Fleet (Fleet Forces Command—Atlantic), 3rd Fleet (Eastern and Central Pacific), 4th Fleet (Caribbean), 5th Fleet (Persian Gulf), 6th Fleet (Mediterranean Sea and Africa), 7th Fleet (Western Pacific and Indian Ocean), and the newly re-established non-operational 10th Fleet (Cyber).⁸⁷ Five of these fleets are attached to either Fleet Forces Command (2nd and 4th Fleets), Pacific Fleet (3rd and 7th Fleets), or Naval Forces Europe (6th Fleet).⁸⁸ These five fleets all fall under the operational control of a full admiral. The two exceptions are the Naval Forces Central Command, whose three-star commander is dual-hatted as Commander 5th Fleet, and the 10th Fleet. The 10th Fleet is outside the Navy's operational command; it falls under US Cyber Command, led by Lieutenant General Keith B. Alexander, US Army.

The Navy's tradition of feudal distribution above the O-6 (captain) level is evident in the officers they chose to lead these fleets. Of the seven fleets, three are

⁸⁵ An officer of the line is any officer possessing a surface warfare, subsurface warfare, or naval aviation designation. All officers of the line can be identified by a star inboard of the rank designation on his/her shoulderboard. Officers of the line have Naval Officer Billet Code (NOBC): 1100 (non-qualified officer of the line), 1110 (qualified surface warfare officer), 1120 (qualified submarine warfare officer), 1130 (special warfare [SEAL] officer), 1140 (special operations officer by virtue of training in the Explosive Ordnance Disposal and Diving/Salvage areas), 1300 (previously qualified naval aviator or naval flight officer disqualified for medical reasons), 1310 (naval aviator), and 1320 (naval flight officer). Information provided by Heberer, interview.

⁸⁶ A Task Force (TF) is a group of ships task organized to conduct either a specific or general operational mission. Task Forces almost always come from the Second (Atlantic) or Third (Pacific) Fleets and carry a two number designator with the first number being the fleet from which it originated (e.g TF 20). Upon entry into another numbered fleet's area of responsibility, they are redesignated as a task group according to that fleet's numbering convention (e.g. TF 40 if operating in the Caribbean). Heberer, interview.

⁸⁷ Information derived from: <http://www.navysite.de/navy/fleet.htm#7th> and from interview from LCDR John Stapleton, interview by the author, 6 May 2010. LCDR Stapleton is a P-3 pilot and 23-year Active Duty Naval Officer. He was a prior enlisted seaman who spent nine years serving aboard ships.

⁸⁸ Information on fleet organization derived from "Navy Organization" on the Navy's official website located at: <http://www.navy.mil/navydata/organization/orgopfor.asp>

commanded by surface warfare officers, two by submariners, and two by aviators.⁸⁹ Of the three higher commands (Fleet Forces Command, Pacific Fleet, and Naval Forces Europe), two are led by aviators and one by a surface officer.⁹⁰ This feudal distribution is also evident in the sub-cultural balance of the admirals selected for senior leadership positions as depicted in Figures 19 and 20. The data illustrate the Navy's tendency of maintaining a feudality in its senior leadership and also appear to validate the notion that if a naval officer has a successful independent command tour at sea, he is eligible for promotion to admiral. In his study on bureaucratic cultures, James Wilson claims that "the greater balance among rival cultures in the Navy than those in the Air Force suggests that the problem of having multiple cultures can be managed without having one culture win out over another."⁹¹

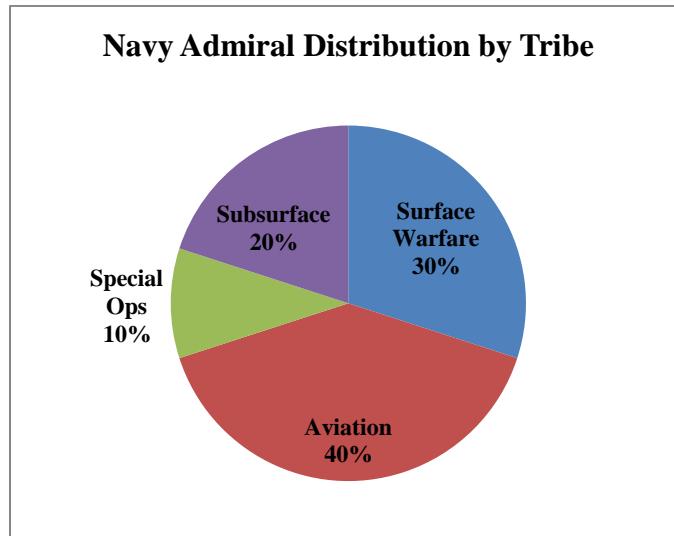


Figure 19. Subculture Distribution of Navy Four-Star Admirals

Source: *United States Navy Biographies Website*⁹²

⁸⁹ Information for senior Navy leadership derived from Official Website of the United States Navy Biography page located at: http://www.navy.mil/navydata/bios/bio_list.asp#A.

⁹⁰ Information for senior Navy leadership derived from Official Website of the United States Navy Biography page located at: http://www.navy.mil/navydata/bios/bio_list.asp#A.

⁹¹ James Q. Wilson, *Bureaucracy: What Government Agencies Do and Why They Do It* (New York, NY: Basic Books, Inc., 1989), 106.

⁹² As of 06 May 2010, the Navy has 10 Admirals. The tribal breakdown numbers are: Aviation (4), surface warfare (3), subsurface warfare (2), and SEAL special operations (1). Information derived from the US Navy Biography page located at: http://www.navy.mil/navydata/bios/bio_list.asp#A.

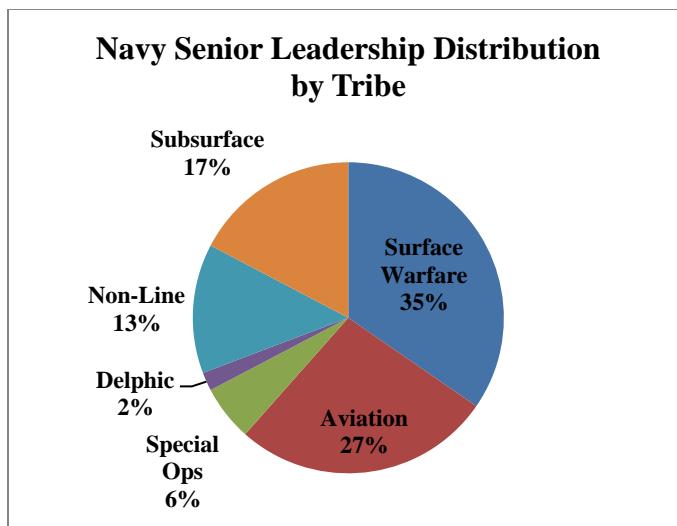


Figure 20. Subculture Distribution of Navy Senior Leadership

Source: United States Navy Biographies Website⁹³

Another obstacle that may prevent non-fighter tribe members from advancing to senior leadership positions may be the laws governing general-officer billets and promotions. According to Title X, Chapter 32, the Air Force is limited to 279 general-officer billets.⁹⁴ Of those 279 generals, no more than 16.4 percent may have more than two stars and no more than 25 percent of that number may have four stars.⁹⁵ This equates to 46 three-star and four-star general officers, of whom no more than 11 can be four-star general officers. The Air Force may have more than 11 four-star generals if it has officers serving in a joint four-star position.⁹⁶ Similarly, it may have fewer than 35 three-stars at any given time in order to promote an additional brigadier or major general. Currently, the Air Force has 51 generals above the rank of three-star.

⁹³ As of 6 May 2010, the Navy has 10 Admirals and 42 Vice Admirals. Non-line officers include four support (two Civil Engineer, one acquisition, and one supply officer), two Medical Doctors, and one Judge Advocate General. The tribal breakdown numbers are: Aviation (14), Surface Warfare (18), Subsurface Warfare (9), SEAL Special Operations (3), and Intelligence (1). Information for senior Navy leadership derived from Official Website of the United States Navy Biography page located at:

http://www.navy.mil/navydata/bios/bio_list.asp#A.

⁹⁴ *United States Code Title 10*, 2009 edition, Subtitle A, Part 2, Chapter 32, Section 526(a3). Information derived from Cornell University Law School site located at:

http://www.law.cornell.edu/uscode/10 USC_sec_10_00000526---000-.html (accessed 07 May 2010).

⁹⁵ *United States Code Title 10*, 2009 edition, Subtitle A, Part 2, Chapter 32, Section 525(b1). Information derived from Cornell University Law School site located at:

http://www.law.cornell.edu/uscode/10 USC_sec_10_00000525---000-.html (accessed 6 May 2010).

⁹⁶ The Air Force currently has 14 four-star generals, three of whom are currently serving in joint billets. The joint billets do not count against the total allowable Air Force four-star billets.

To increase its authorized senior leadership allocation, the Air Force must petition Congress. However, with the reduction in Air Force manning that has been ongoing since FY90, this request is unlikely to be granted.⁹⁷ Therefore, in order for the Air Force to promote more non-fighter generals, it would have to promote fewer generals from other communities, something not always possible because of the Air Force's organizational structure. For example, ACC has three NAFs compared to only one in AMC. Each NAF is led by a three-star general and a one-star vice-commander. Based on this fact, ACC's NAFs garner six general-officer billets compared to AMC's two.⁹⁸ This not only limits AMC's ability to develop one- and two-star generals to become three- and four star generals, but also limits the command's ability to stratify its senior officers. When considering the support tribe, the situation is bleaker. Because non-rated officers are not legally allowed to command a NAF, the ability to develop the support tribe's one-star and two-star generals into three-star and four star generals becomes significantly harder. The data in Figure 18 attest to this fact.

Pilots, on the other hand, face no restriction on units they can command. This is evident when looking at the leadership billets of the Air Staff and MAJCOMs. Neither the Deputy Chief of Staff for ISR (A2) nor the commander of Air Force Material Command (AFMC) is a member of the delphic or support tribe. Instead, the A2 is led by a fighter pilot (Lieutenant General David A. Deptula) and the AFMC also by a fighter pilot (General Donald J. Hoffman). Of all the tribal disparities in senior leadership positions existing within the Air Force, this issue strikes the deepest chord among members of the delphic and support tribes.⁹⁹ The fact that the Air Force does not permit non-rated to command flying MAJCOMs even though this is not prohibited by law, yet still allows pilots to command non-rated specialties leads the non-rated to believe that

⁹⁷ As of 31 March, 2010, the Air Force had 331,486 (65,349 officers and 266,137 enlisted) personnel on active duty. In FY 90, there were 530,528 (99,710 officers and 430,818 enlisted) personnel on active duty. Information derived from "Air Force Active Duty as Reported by AFPC" located at:

<http://www.afpc.randolph.af.mil/demographics/reportSearch.asp>

⁹⁸ The number of NAFs can be misleading because currently a substantial number of fighter and bomber tribe officers are commanding Wings that have neither fighter nor bomber assets.

⁹⁹ Maj John Baquet and LtCol Ericka Flanigan, interview by the author, 06 May 2010. Baquet also mentioned that the Deputy Chief of Staff for Logistics, Installations, & Mission Support (A4/7) is led not by a logistics officer, but a mobility navigator, Lieutenant General Loren M. Reno. However, Baquet points out that Reno is the exception to the rule because he has spent more time serving as a logistics officer than as a navigator.

pilots can occupy non-pilot specialty positions but not vice versa because only pilots wear the universal “leadership” badge.¹⁰⁰

Colonel David Solomon, a member of the fighter tribe, noted that “there is a *perceived* partiality toward rated Airmen for promotion and command. In effect, people see the rich getting richer and the poor getting poorer.”¹⁰¹ Solomon also noted that the tribal selection criteria for determining who will command a flying MAJCOMs or to an Air Staff position is slanted to favor the pilot tribe.¹⁰² Likening the process to a “one-way street” for the non-pilot and a “two-way street” for the pilot, Solomon acknowledged that pilots can serve in any leadership position, both flying and non-flying.¹⁰³ The non-rated, on the other hand, are restricted in their direction of travel and can only serve in senior leadership positions within their tribal specialty.¹⁰⁴

The Air Force has recently realized that the lack of diversity in senior leadership positions is a problem, especially among the delphic tribe. “According to Brigadier General (sel) Cathy Clothier, Director of Air Force General Officer Management, the Air Force is currently positioning itself to develop more general officers and create more billets for them in the cyberspace and intelligence career fields.”¹⁰⁵ Furthermore, Lieutenant General David Deptula, the Air Force Deputy Chief of Staff for Intelligence, Surveillance, and Reconnaissance, stated that he is working to “expand the number of Air Force general-officer intelligence billets, help position Air Force personnel to fill important joint and national level intelligence billets, and organize intelligence as an Air Force wide-enterprise.”¹⁰⁶ To expand the number of billets in these emerging mission

¹⁰⁰ A “leadership” badge was a tongue-in-cheek comment made by LtCol Flanigan, interview. A “leadership badge” refers to the wings of rated aviators, primarily pilots and secondarily navigators.

¹⁰¹ Col David Solomon (Vice Commandant, Air Command and Staff College), interview with the author, 7 May 2010. Colonel Solomon is an F-15C pilot who has been on Active Duty for 27-years. Col Solomon was very careful to qualify this comment. Although the perception may exist for promotion, Solomon feels that this is unjustified. As a member of a promotion board, Solomon felt that every member’s record was reviewed and briefed without reference to tribal affiliation. Accordingly, every Airman had “equal” standing and chance for promotion on the board on which he sat.

¹⁰² Solomon, interview.

¹⁰³ Solomon, interview.

¹⁰⁴ Solomon, interview.

¹⁰⁵ Brig Gen (sel) Cathy Clothier, Director, Air Force General Officer Management, Deputy Chief of Staff, Manpower and Personnel, Washington, DC. Interview by Lendermen, 2 February 2007, cited by Major Laura L. Lenderman, *The Rise of Air Mobility and Its Generals*, Drew Paper no. 1 (Maxwell Air Force Base, AL: Air University Press), 2008, 70.

¹⁰⁶ Gayle S. Putrich, “USAF Reorganizing Intelligence Command,” *Defense News*, 30 January 2007, <http://integrator.hanscom.af.mil/2007/February/02012007/02012007-15.htm> (accessed 07 May 2010).

areas, the Air Force has to reduce the number of general officers from the other tribes because of congressional limitations on the size of its general officer corps. Because the numbers of senior general officers remains fixed at 46, the Air Force must reevaluate its promotion selection rates among the tribes to accomplish Deptula's goal.

Prior to Schwartz's ascension to the Chief of Staff position, only pilots who flew combat aircraft led the Air Force. This reality was further reflected in the historic tribal composition of the senior leadership. Since the Air Force's institutional identity revolved around the combat pilot, the pilots of the CAF became the standard-bearers of the warrior class and were promoted accordingly. The combat pilot's deification created a mentality within the service that assumed that because this is the way it was, this is the way that it would always be.¹⁰⁷ Schein's analysis of organizational change supports this perception: "If an organization has had a long history of success with certain assumptions about itself and the environment, it is unlikely to want to challenge or reexamine those assumptions."¹⁰⁸ Likewise, in his discussion of successful innovations in military organizations, Stephen Rosen contends that unless senior leaders perceive the need for change, it will not occur.¹⁰⁹ This belief system of the warrior class worked well when the underlying assumptions of the organization were not at odds with the external environment. However, when the underlying assumptions of the dominant tribe ceased to respond appropriately to changing environmental realities, an organizational crisis ensued.

Schein discussed this danger and identified a particular option leadership can pursue in a mature and potentially declining organization when underlying assumptions become dysfunctional. To prevent "old-school" leadership from blindly perpetuating itself and serving as an obstruction to needed change, Schein states that the organization must find a process to promote leaders possessing the insight and ability to overcome the assumptions that are constraining the organization.¹¹⁰ Although some of these leaders may come from within the dominant tribe of the organization, Schein contended that

¹⁰⁷ Several people interviewed for this paper reveal that this is a fairly common belief among many Air Force members.

¹⁰⁸ Edgar H. Schein, *Organizational Culture and Leadership*, 3rd ed. (San Francisco, CA: Jossey-Bass Publishers, 2004), 312.

¹⁰⁹ Stephen P. Rosen, *Winning the Next War: Innovation and the Modern Military*, (Ithaca, NY: Cornell University Press, 1991), 96.

¹¹⁰ Schein, *Organizational Culture and Leadership*, 409.

dominant tribe managers may neither be willing nor able to spearhead the needed change.¹¹¹ What is then required is leadership that comes from outside the dominant subculture. Prior to promoting these individuals into positions of senior leadership, Schein argued that these new leaders must first be able to define and understand the problem within the culture, unfreeze it, redefine and change it, and then refreeze the new assumptions into an organizational culture that reflects environmental reality.¹¹²

Schein warned that an organization's culture is not easy to change because senior leaders have a great deal of power to influence the choice of their successor and for leadership to perpetuate itself.¹¹³ He also identified another impediment to effecting change: the obstructionist efforts of bureaucratic automatic pilots more concerned with maintaining the status quo.¹¹⁴ Bennis agrees with Schein and maintains that entrenched bureaucracies committed to the status quo continually seek to undermine the efforts of the trusting leader.¹¹⁵ Largely to blame for this are social forces that reflect the friction existing between the good of the common group and the individual tribes.¹¹⁶ Both Schein and Bennis found that it often takes a crisis to accelerate the transformation process. It took 20 years and the failure in Vietnam for the Air Force to effect needed cultural change. However, the etiology of this change stretched back to the Air Force's experience during the Korean War, and it took a considerable amount of time to promote people from the "Korean Generation" not emotionally embedded to the bomber tribe into power positions.¹¹⁷ Since this change was measured, senior leaders were gradually able to direct the total culture toward the shared assumptions of the fighter tribe.

The leadership change that occurred in 2008, however, was unprecedented. This traumatic experience placed the Air Force at what one knowledgeable analyst has called

¹¹¹ Schein, *Organizational Culture and Leadership*, 410.

¹¹² Schein, *Organizational Culture and Leadership*, pp 314, 410.

¹¹³ Schein, *Organizational Culture and Leadership*, 408-409.

¹¹⁴ Schein described these automatic pilots as being extremely dangerous to the health of an organization. Auto-pilots tend to be non-confrontable and non-debatable, making needed underlying assumption change difficult even after the organization becomes dysfunctional. Schein, *Organizational Culture and Leadership*, 31.

¹¹⁵ Warren G. Bennis, "Why Leaders Can't Lead," in *Classic Readings in Organizational Behavior*, ed. J. Steven Ott, 2d ed. (Orlando, FL: Harcourt Brace & Company, 1996), 221.

¹¹⁶ Warren G. Bennis, "Why Leaders Can't Lead," 221.

¹¹⁷ Schein, *Organizational Culture and Leadership*, 303.

“the historical nadir of confidence, reputation, and influence.”¹¹⁸ By taking drastic action, Gates usurped the sub-culture that was the guardian of the institution’s culture and created the conditions for formation of a new culture.¹¹⁹ Schein warns of the dangers to an organization’s institutional identity when an outsider is forcibly infused atop the leadership elite.¹²⁰ The high levels of anxiety that develop when the cultural assumptions of the dominant tribe are brought into question by a new leader not embedded to the reigning tribe’s underlying assumptions constitute a recipe for organizational chaos. But because Secretary Gates chose to pursue institutional change in this manner, it now falls upon General Schwartz to develop strategies not only to manage the cultural conflict that has ensued, but also to impart a new identity upon the service that reflects the strategic focus of the DOD. To do this, he must promote leaders with the insight and ability to overcome the assumptions that have constrained the service.

The legal guidelines for commissioned officer promotions in all services are delineated in Sections 611, 612, 14101, and 14102 of United States Code (USC) Title 10.¹²¹ Table 2 depicts the point where commissioned officers (in all services) can expect to be promoted based upon their time-in-service. Minimum time-in-grade for promotion is established by federal law (10 U.S.C.) and is also shown in Table 2. Changes in authorizations, and losses and promotions to the next higher grade create fluctuations in both the time in service (TIS) and time in grade (TIG) for each of the military services.

Table 2. Desired Active-Duty List Promotion Timing and Opportunity

Desired Active-Duty List Promotion Timing and Opportunity		
TO GRADE	TIMING (note)	OPPORTUNITY
O-4	10 Years +/- 1	80%
O-5	16 Years +/- 1	70%
O-6	22 Years +/- 1	50%

Note: Years of commissioned military service

Source: Department of Defense (DOD) Instruction, 1320.13

¹¹⁸ Thomas P. Ehrhard, *An Air Force Strategy for the Long Haul*. (Washington, DC: Center for Strategic and Budgetary Assessments, 2009), 28.

¹¹⁹ Schein, *Organizational Culture and Leadership*, 307.

¹²⁰ Schein, *Organizational Culture and Leadership*, 309.

¹²¹ The following paragraph is taken from Department of Defense (DOD) Instruction, 1320.12, *Commissioned Officer Promotion Program*, 27 September 2005, 1.

However, DOD guidance requires that promotion opportunities for commissioned officers be (approximately) the same for all services within the constraints of the available positions open for promotion.

When addressing below primary zone (BPZ) promotions, Department of Defense (DOD) Instruction, 1320.12, *Commissioned Officer Promotion Program*, 27 September 2005 states:

“That the number of officers on the Active Duty List who may be recommended for promotion to the grades of O-4 through O-6 from those being considered from below the promotion zone in any competitive category, may not exceed 10 percent of the maximum number of officers to be recommended for promotion in such competitive category. If the Secretary of the Military Department concerned determines the needs of the Military Service concerned require additional recommendations from below the promotion zone, he or she may, with the approval of the Secretary of Defense, provide for the recommendation of a greater number. In that case, the number of officers selected may not exceed 15 percent of the total number of the officers that the selection board is authorized to recommend for promotion.”¹²²

DOD 1320.12 further stipulates that each service is to “Establish competitive categories, as required, to manage, in relation to the requirements of the officer category concerned, the career development and promotion of *certain* groups of officers whose specialized education, training, or experience, and often relatively narrow utilization, make separate career management desirable.”¹²³

Morris Janowitz argues that the “organizational revolution in warfare means that the process of advancement and promotion is not merely the result of technical and combat skill, but also the result of communication, persuasion, and negotiation.”¹²⁴ There are many factors that may contribute to promotion to senior leadership positions not available to this researcher. Commissioning source, advanced degrees, selection to attend in-residence PME programs, Weapons School attendance, command and combat experience, prior early promotions, and assignments working for flag officers are but a few elements that are beyond the scope of this study. The Air Force does not provide promotion information by specific career fields. When asked for this information, the Air

¹²² DOD Instruction, 1320.12, *Commissioned Officer Promotion Program*, 2.

¹²³ DOD Instruction, 1320.12, *Commissioned Officer Promotion Program*, 3.

¹²⁴ Morris Janowitz’s, *The Professional Soldier: A Social and Political Portrait* (New York, NY: The Free Press of Glencoe, 1960), 73-74.

Force Personnel Center (AFPC) replied that it was unavailable.¹²⁵ Therefore, what follows is a brief discussion of perhaps the most credible indicator for advancement to future flag rank, the BPZ promotion.¹²⁶

The BPZ promotion serves as a strong prerequisite for future selection into the senior leadership of the Air Force. Some pundits say that a BPZ promotion is the most important indicator.¹²⁷ Upon reviewing the biographies of the Air Force's senior leadership, the pundits appear to be correct. Of the 51 general officers surveyed, 13 out of 14 four-stars and 32 out of 37 three-stars had received a BPZ promotion at least once in their careers.¹²⁸ Of the ones receiving a BPZ promotion, greater than half were promoted early on two occasions. According to AFPC's historical data, pilots are promoted BPZ more often than any other occupational category. When comparing the BPZ promotion data from FY89 to FY09, the pilot category was promoted anywhere from 1.1 to 4.0 times more often to the rank of lieutenant colonel than other categories (navigator, non-rated operations, air battle manager, or mission support) in 19 out of 20 years.¹²⁹ The only year this did not occur was in FY04 when mission support had a 5.8% BPZ rate to the 4.5% for pilots.¹³⁰ For colonel BPZ promotions, the rate actually

¹²⁵ AFPC jealously guards promotion rates by career field. After numerous attempts to obtain specific data from a variety of Air Force offices (in both Washington, D.C. and Randolph AFB, TX), this author was told that he would *never* be allowed to use promotion data for specific career fields for research of this type. When asked how far back such data was considered "sensitive," this author was told "forever." AFPC also does not provide a breakdown by AFSC of Definitely Promote (DP)/Promote (P) recommendations. The only data that is expressed is promotion percentage of eligible officers by recommendation.

¹²⁶ Biographical data shows that most senior officers were promoted early at one time or another during their career.

¹²⁷ Lt Col Carl D. Evans, "Growing Tomorrow's Leaders in Today's Environment," Research Report no. 98-094, (Maxwell AFB, AL: Air War College, 1998), 37-55. In his paper, Evans discusses factors which have changed the Air Force's "executive development landscape," thus leading the service to emphasize BPZ promotion as a quality indicator for selection to the general officer rank. Cited in Danskine, "The Fall of The Fighter Generals," 100.

¹²⁸ Information derived from the Air Force official biographies site at:
<http://www.af.mil/information/bios/results.asp>.

¹²⁹ From FY89 to FY09, pilots BPZ promotion rate to LtCol was 5.13%, as compared to 2.10% for navigators, 2.21% for non-rated operations, and 2.48% for mission support. Data for air battle managers BPZ was first tracked by AFPC in FY00. The BPZ promotion rate for air battle managers in this time period was 2.18%. Information derived from "Active Duty Officer Promotions Line of the Air Force (LAF) Historical" located at: <http://wwa.afpc.randolph.af.mil/demographics/reportSearch.asp>

¹³⁰ For In Primary Zone (IPZ) promotion rates, pilots were selected at a 7-10% higher rate to their peers until FY 00 when mission support exceeded pilot selection by 5-10% in six out of ten years. Information derived from "Active Duty Officer Promotions Line of the Air Force (LAF) Historical" located at:
<http://wwa.afpc.randolph.af.mil/demographics/reportSearch.asp>

decreases for pilots. Although the numbers still favor this tribe, the rate ranges from 1.83 to 3.31 times greater when compared to the other tribes.¹³¹

For both lieutenant colonel and colonel BPZ promotion, the number of pilots considered has always been two-to-six times greater than the numbers from the other categories with the exception of mission support, which is a larger tribe.¹³² Therefore, even if the promotion rates are comparable, the total number promoted has always favored the pilot category when compared to navigators, air battle managers, and non-rated operations.¹³³ AFPC's data does not separate the tribes by AFSC. At best, the only assumption that can be made as to which pilot tribe dominates in BPZ promotion has to be inferred from the demographics of the senior leadership cadre. In this light, the perception is that the fighter tribe is favored.

The Navy, by contrast, rarely promotes below the zone for either O-5 or O-6.¹³⁴ Of the archival promotion data reviewed from FY03 to FY10, only 50 of 3998 (1.25%) O-5's and 41 of 1871 (2.19%) O-6's were promoted BPZ in that eight-year period.¹³⁵ When comparing promotion rates among the Navy's three dominant tribes, there was

¹³¹ From FY89 to FY09, pilots BPZ promotion rate to Col was 4.80%, as compared to 1.52% for navigators, 2.63% for non-rated operations, and 2.14% for mission support. Data for air battle managers BPZ was first tracked by AFPC in FY00. The BPZ promotion rate for air battle managers in this time period was 1.45%. Information derived from "Active Duty Officer Promotions Line of the Air Force (LAF) Historical" located at: <http://wwa.afpc.randolph.af.mil/demographics/reportSearch.asp>

¹³² From FY89 to FY09, there were 24,780 pilots considered for BPZ promotion to LtCol and 18,887 for BPZ to Col, as compared to 11,524 (LtCol) and 8,899 (Col) for navigators, 10,873 (LtCol) and 6,131 (Col) for non-rated operations, and 42,314 (LtCol) and 23,989 (Col) for mission support. Data for air battle managers BPZ was first tracked by AFPC in FY00. Numbers of air battle managers considered for BPZ promotion was 1,010 (LtCol) and 621 (Col). Information derived from "Active Duty Officer Promotions Line of the Air Force (LAF) Historical" located at:

<http://wwa.afpc.randolph.af.mil/demographics/reportSearch.asp>

¹³³ From FY89 to FY09, 1,271 pilots were selected BPZ to LtCol and 906 were selected BPZ to Col. By contrast, mission support, which had 1.7 times more officers than pilots considered for BPZ promotion to LtCol only selected 1,050. For Col, mission support had 1.3 times more officers considered for BPZ promotion and still selected less than the pilots at 513. For the other categories, 242 LtCol and 135 Col navigators were selected for BPZ promotion and 241 LtCol and 161 Col non-rated operators were selected for BPZ promotion. Since FY00, 22 LtCol and 9 Col air battle managers were selected for BPZ promotion. Information derived from "Active Duty Officer Promotions Line of the Air Force (LAF) Historical" located at: <http://wwa.afpc.randolph.af.mil/demographics/reportSearch.asp>

¹³⁴ Information derived from Navy Personnel Command Bureau of Naval Personnel (BUPERS) official promotion archive located at: <http://www.npc.navy.mil/Boards/ActiveDutyOfficer/Archive>

¹³⁵ Information derived from Navy Personnel Command Bureau of Naval Personnel (BUPERS) official promotion archive located at: <http://www.npc.navy.mil/Boards/ActiveDutyOfficer/Archive>. For comparison purposes, in that same eight-year period, the Air Force promoted 977 of 9801 (9.97%) O-5's and 569 of 3822 (14.9%) O-6's BPZ. Information derived from "Active Duty Officer Promotions Line of the Air Force (LAF) Historical" located at: <http://wwa.afpc.randolph.af.mil/demographics/reportSearch.asp>

relative parity. Within the aviation community, however, the Navy is similar to the Air Force in that it favors fixed-wing carrier aviation (fighter/attack) over the helicopter and maritime community.¹³⁶ This reality is reflected in the senior leadership of Navy aviation. Of the 14 aviation flag officers, 12 are fixed-wing carrier pilots, and 2 are from the maritime community.¹³⁷ The helicopter pilots have no senior leadership representative. Such evidence reveals that naval aviation suffers from the same tribal imbalance toward the fighter community as the Air Force.

This intra-tribal disparity in a service that values feudal balance can be explained using the same rationale which accounts for Air Force favoritism toward the fighter pilot. Command of a carrier has always been recognized by officer promotion boards as being a prerequisite for selection to admiral. To be eligible to command a carrier, an aviator must be a pilot who has commanded a squadron afloat. Based on the number of carrier-based fixed-wing squadrons versus rotary-wing squadrons, the Navy's organizational structure is canted toward promoting fixed-wing carrier aviators to senior leadership positions.¹³⁸

In spite of this reality, all three naval aviation officers interviewed for this investigation did not feel that the intra-tribal imbalance in favor of carrier aviators was a problem. All felt that upon selection to flag rank, all admirals ceased being advocates for their respective tribe and instead became advocates for issues of the greater Navy.¹³⁹ None of these officers felt that Navy admirals made decisions based on tribal affiliation. LCDR John Stapleton explained this by stating that the common seafaring identification and love for the institution as a whole made this possible.¹⁴⁰ Stamper offered two other reasons why Navy admirals are not tribal by nature: the cross-pollination that occurs at O-4 and above level, and the rarity of BPZ's.¹⁴¹ He stated the exposure that naval officers receive to the other warfighting communities cannot be replicated in any other

¹³⁶ On average, carrier aviators were promoted 20 to 30% above their helicopter and land-based peers. Information derived from Navy Personnel Command Bureau of Naval Personnel (BUPERS) official promotion archive located at: <http://www.npc.navy.mil/Boards/ActiveDutyOfficer/Archive>

¹³⁷ Information for senior Navy leadership derived from Official Website of the United States Navy Biography page located at: http://www.navy.mil/navydata/bios/bio_list.asp#A.

¹³⁸ Maritime pilots are not eligible for carrier command.

¹³⁹ Heberer, Stamper, and Stapleton, interview.

¹⁴⁰ Stapleton, interview.

¹⁴¹ Stamper, interview.

manner, to include PME.¹⁴² Furthermore, Stamper stated that shortening this critical exposure by two to four years through early promotion so that an individual can assume a higher billet would be counterintuitive to the best interests of the service because sea (and fleet) experience cannot be taught.¹⁴³ All three naval officers agreed that the message and actions of the senior leadership continually emphasized the “we” of the Navy team. This perceived inclusiveness fostered a sense of cohesion and institutional teamwork within them that transcended tribal boundaries. Furthermore, all agreed that the existence of a clearly defined unifying cause inclusive of every subculture made pledging loyalty to the institution an easy choice to make.

Lieutenant General Michael Short believes that the Navy’s model of cross-pollination has merit. Although he advocates a slightly different approach by outlining two different career tracks (operational and administrative) for senior officers, Short provides sage warning to the Air Force if it does not dramatically alter its career progression path to properly prepare its senior leadership to lead at the operational level of war.¹⁴⁴ Short states:

Our history tells us that progression to senior officer ranks is achieved by service on the organize, train, and equip (OT&E) side of the Air Force, not the Component, Numbered Air Force (CNAF) side. *We must change the culture.* I advocate a system that tracks officers following promotion to O-4 into either the OT&E side or the CNAF side. Majors going to the staff would either go to OT&E staffs or the CNAF with service in either the Air and Space Operations Center (AOC) or the Air Force Forces (AFFOR) staff. Upon promotion to O-5, officers would return to the squadron level to compete for command. Promotion to O-6 would return the officer to the CNAF or the OT&E Staff to serve as division chief in the AOC, a leadership position on the AFFOR staff, and a corresponding position on the OT&E Staff. The most promising officers would return to the field to compete for group and wing command. Upon promotion to Brigadier General, CNAF officers would serve as AOC Director or Chief of the AFFOR Staff, while OT&E trackers would assume senior staff positions. Promotion to Major General would result in the CNAF tracker serving as Deputy AFFOR Commander/Joint Force Air Component Commander (JFACC) while OT&E trackers would continue to more senior staff positions. The best of the best CNAF leaders would emerge as CNAF commanders fully qualified in the weapons system they are about

¹⁴² Stamper, interview.

¹⁴³ Stamper, interview.

¹⁴⁴ LTG (Ret) Michael C. Short, e-mail to the author, 27 May 2010.

to command while OT&E Lieutenant Generals would serve on the A-1 thru A-9 of the Air Staff. Never again would the Air Force select a senior officer to command a CNAF having never served at the operational level of war with no experience in the weapons system.¹⁴⁵

However, Short advocates an approach different from the Navy when it comes to BPZ promotions. He stated:

I am very comfortable with the Air Force BPZ system as it currently exists. We need a system that identifies our top performers at the appropriate time in their careers and accelerates them to leadership positions. I could not say that when we were promoting young officers to Major three years early. We promoted officers before they had really shown consistent superior performance, cheated them of experience they would need later in their careers and drove many promising officers out of the service because they perceived that they had no chance to compete for senior leadership having not been promoted early to Major. Our current system gives officers 13-14 years to prove themselves deserving of BPZ promotion while insuring that officers can be accelerated to General Officer (GO) in time to insure that they will have sufficient years in the GO ranks to provide the senior leadership we need and expect. If we did not have a BPZ system, I do not believe that we would be able to consistently produce GOs with time in service remaining sufficient to allow them to provide the length of senior leadership the Air Force requires.¹⁴⁶

Summary

This chapter has examined three roadblocks to effecting lasting organizational change within the Air Force: inadequate enculturation training, an organizational structure that favors pilot command opportunities, and the Air Force's promotion and assignment system for general officers. In this investigation, we have learned that the enculturation training designed to impart an "Airmen first and specialist second" mentality at the ASBC is struggling to accomplish its stated purpose. It has also revealed that the ASBC's potential shortcomings lie not only in its length, but also in its sequential placement in an officer's enculturation training. This chapter has also revealed that inadequate follow-on enculturation training at the SOS is failing to educate Airmen in the complementary roles that air, space, and cyberspace play in the Air Force. The Cross Domain Operator (CDO) program under development at ACSC has been designed to

¹⁴⁵ LTG (Ret) Michael C. Short, e-mail.

¹⁴⁶ LTG (Ret) Michael C. Short, e-mail.

combat tribal occupationalism by educating a select group of Airmen in the complementary roles that air, space, and cyberspace play in the Air Force. This investigation has also revealed that the Navy prevents tribalism without the use of PME. By making cross-pollination among subcultures a prerequisite for promotion above the grade of O-4 for aviators, the Navy has been able to maintain a strong, common seafaring institutional identification.

We have also seen that the Air Force is organizationally structured in favor of the fighter tribe. This is understandable considering the numbers and types of aircraft within its inventory. We have also explored the Air Force's administrative and operational structure and discovered that due to the larger number of flying versus non-flying wings, pilots have a much greater opportunity to command. Legislation restricting command of flying units to pilots (and other rated flying officers) maintains this disparity.

The lack of command opportunity above the O-6 level for the support tribe is reflected in the senior leadership tribal composition of the SAF and Air Force as a whole. The disparity in BPZ promotion rates for pilots reinforces this tendency. There is a strong, positive correlation between BPZ promotion and future selection to senior leadership positions within the Air Force. The Navy limits the use of BPZ promotions, and maintains its feudal senior leadership balance by preserving promotion parity among subcultures. The Air Force faces multiple dangers if it does not change the way it operates. If the lesser tribes remain inappropriately rewarded and excluded from the senior leadership elite, its institutional identity will remain weak due to strong tribal boundaries and the lack of a unifying cause.

The final chapter will detail the steps the Air Force must take if it is to blur its tribal boundaries and forge a new, comprehensive institutional identity. The dismissal of Secretary Wynne and General Moseley, coupled with the rising importance of the delphic, mobility, special operations, and support tribes, has created the conditions to forge that identity. Thus, General Schwartz and the Air Force must now seize the moment and begin the process of cultural transformation to heal the large tribal rifts that plague the Air Force.

Conclusions

The service's purpose is to generate combat capability that protects the country, and not necessarily to provide equal career opportunities for those who fly heavies, or, heaven forbid, don't wear wings at all.

-- Merrill McPeak

History is replete with examples of militaries that failed due to their inability to transform organizations and culture, adopt new operational concepts, or leverage breakthrough technologies. ...victory comes to those who foresee, recognize and act on changes in the strategic environment. To succeed—indeed, to avoid catastrophic failure—we must redefine the Air Force for the 21st Century.

-- T. Michael Moseley

The Air Force has its own institutional identity, distinct from that of the other services. But what is it that makes the Air Force unique? Its identity is based largely on its interpretation of history and its ardent belief in the primacy of technology. These have led to an organizational culture in which well-defined, and often competing tribal subcultures have flourished, creating a weak institutional identity in which Airmen identify more with their occupational specialties than with the institution. This characteristic, coupled with the existence of a monarchic leadership structure, breeds discontent among the lesser tribes and undermines the development of a common unifying cause. Yet, the Air Force's organizational culture did not develop arbitrarily. It followed a predictable progression that was well grounded in organizational culture theory. When viewed through this expository lens, organizational culture theory helps explain the Air Force's institutional evolution by illustrating how its historical experiences shaped the development of both its underlying assumptions and organizational warfighting functions. Because the Air Force has a remarkably different culture from that of the other services, it faces unique challenges and requirements. Therefore, prior to making corrective recommendations, we must first show how the Air Force arrived at its present state.

Like all durable groups, the Air Force's distinctive personality was shaped by its history. This past affects its behavior and informs the development of an institutional

identity that revolves around the *essence*, the beliefs of the *corps* around the *core* of its monarchic tribe. The institution's underlying assumptions were largely influenced by the self-serving predilections of the leadership elite as it responded to perceived changes in the external environment. This was true of the bomber generals of the 1950s and 60s to the fighter generals of today. Organizational culture theory indicates that the self-serving actions of these two monarchic tribes were understandable and predictable. By demonstrating that organizational culture in mid-life-stage institutions is slow to change due to the embedded self-serving bureaucracies that obstruct change, the literature suggests that senior leadership's role becomes even more important in reformulating an organization's cultural assumptions after the *essence* becomes dysfunctional and ceases to serve the institutional interests.

The past has also demonstrated that although the dominant groups changed, the Air Force's mask of war has remained the same. The Air Force has consistently promoted the decisiveness of airpower. Whether it was via strategic bombardment advocated by the bomber generals, or via strategic attack and air superiority advocated by the fighter generals, the overarching need to maintain Air Force legitimacy as an autonomous organization not subordinate to the Army remained. Perennially identifying itself as the independent airpower organization that only exists "To Fly, Fight, and Win...in the Air," the manner in which it flew, fought, and won was reflected in the doctrinal missions and acquisition priorities favored by the dominant tribe's paradigmatic theory of air warfare. The historical review also demonstrated that the two dominant tribes' unique experiences in warfare shaped their personalities and that these, in turn, led to the development of underlying assumptions that formed the *essence* of the Air Force's institutional identity. Analysis of the Air Force's experience also revealed the survival mechanisms each monarchic tribe used to respond to perceived changes in the external environment. From the bomber generals' denial of strategic bombardment's relative ineffectiveness in the Korean and Vietnam Wars, to the insistence that the First Gulf and Kosovo Wars had proved that airpower had become the decisive instrument of warfare, Air Force organizational culture was slow to change due to the disproportionate influence of the two dominant tribes.

Tribalism confounds the adoption of a universal institutional identity in the Air Force. Although the existence of tribalism is understandable for a service centered on technology, if allowed to progress unchecked, tribal “group think” poses a significant hazard to Air Force health. This hazard is compounded when the monarchic tribe attempts to preserve its hold on power by ensuring that its own members are disproportionately placed in leadership positions. The difficulty that “stove-piped” senior leaders experience when transitioning from a tribal role to a senior leadership position that spans several tribes exemplifies this dysfunction. This policy of unbalanced tribal dominance also breeds discontent among the tribes that are excluded from senior leadership positions. Nevertheless, tribal conflict can be controlled. If managed well, healthy tribalism can guard against “group think” and can increase an organization’s innovation, objectivity, and analytical ability. The changing character of warfare generated by new technologies has led to the potential empowerment of the “rising” delphic, mobility, and special operations tribes and the perennially important support tribe. No longer is the competition for organizational dominance limited to combat pilots of the bomber and fighter tribes. Rather, the increasing importance of these four tribes has created the impetus for the Air Force to find a way to incorporate them into a coherent and united whole. If the Air Force is to respond effectively to the changing external security environment of the present and the future, it must exploit this opportunity.

Three roadblocks exist to effecting lasting organizational change within the Air Force: inadequate enculturation training, an organizational structure that favors pilot command opportunities, and the Air Force’s promotion and assignment system for general officers. The enculturation training designed to impart an “Airmen first and specialist second” mentality at the Air and Space Basic Course (ASBC) is struggling to accomplish its purpose because of shortcomings in its length and sequential placement. The Squadron Officer School (SOS) is not doing enough to educate Airmen in the complementary roles that air, space, and cyberspace play in the Air Force. The Air Force’s organizational structure and command opportunities are tilted to favor pilots and fighter pilots in particular. This is partially justified because the number of flying wings versus non-flying wings accurately reflects the numbers and types of aircraft within the

Air Force's inventory and because public law mandates that only pilots (and other rated flying officers) can command flying units. This command disparity is reinforced by the greater numbers of pilots versus non-pilots being selected for BPZ promotion.

Air Force leadership perpetuates itself. This was demonstrated in the strong correlation that existed between pilot BPZ promotion rates and selection to general and by the disproportionate representation of Air Force senior leadership by the pilot tribes. The Navy ameliorates the adverse effects of tribalism by making cross-pollination a prerequisite for promotion above O-4 and by limiting BPZ promotions. Thus, the Navy has maintained a diverse and experienced officer corps that is well versed in the Navy's mission, while also preventing the perception of tribal promotion favoritism. This policy, coupled with a relative parity in the distribution of its senior leadership positions, has allowed the Navy to maintain a strong institutional identity.

Discovering how to forge a new institutional identity in the Air Force, inclusive of its major tribal subcultures, was this investigation's purpose. But change is never easy. It requires a new institutional direction. It also requires a changing of the old-guard by individuals not emotionally wedded to the dysfunctional culture. This can only be accomplished if the Air Force makes significant changes in each of the three aforementioned areas: initial enculturation training, organizational structure, and its promotion system.

First and foremost, the Air Force must overhaul its initial enculturation training. Training time must be increased by at least one week at the ASBC and two weeks at the SOS. The leadership training of the SOS should be switched with the institutional enculturation training of the ASBC.¹ This change will teach second lieutenants the leadership skills needed to lead Airmen immediately after commissioning instead of at the four-to-seven-year captain mark. The additional weeks of training at ASBC and SOS should be used to incorporate a CDO-type of course emphasizing the complementary roles that air, space, and cyberspace play in the Air Force. The ASBC should also expose

¹ This increase in training-time at both the ASBC and SOS is easily achievable. Currently, the ASBC only teaches five 6-week classes per year and the SOS seven 5-week classes per year. There are enough calendar-weeks in the FY (minus the two-week Christmas/New Year holiday period) to accommodate this "surge."

the young CGOs to the Air Force's three major domains: air, space, and cyberspace.² The SOS, however, should become the main focus of cross-domain orientation. This comprehensive exposure for CGOs can best be accomplished at the SOS because at this point in their careers, these officers have acquired the tactical expertise to synthesize the complementary roles of air, space, and cyberspace. A non-academic change is also needed at Air Force PME programs to assist in fostering a universal institutional identity. In order to blur the tribal boundaries at both the SOS and ACSC, the practice of allowing the rated to wear flight suits while non-rated wear the ABU should stop.

But PME alone cannot solve the weak institutional identity and enculturation deficiencies that have plagued the Air Force since its inception. Without a cross-pollination of officers between communities similar to that practiced by the Navy, Air Force officers will invariably be prone to revert back to their operationally narrow focus and to re-unionize along tribal lines. Thus, the Air Force must institute a policy that requires an operational tour of no less than two-year's duration in a different "domain" than that of their AFSC. Such a tour should become a prerequisite for promotion to the grade of O-5.

Despite the constraints on Air Force organizational structure, changes should be made to the types of officers that the Air Force currently selects to command MAJCOMs. Although legislation restricts command of flying units to rated officers, command of flying MAJCOMs is not restricted. Therefore, in much the same manner as the Navy assigns commands of numbered fleets (with their organic air arms) to any officer of the line, the Air Force should select qualified officers to command flying MAJCOMs. At the MAJCOM command level, the argument that only rated three-star or four-star general officers have the capability to command is fallacious. If a non-rated three-star or four-star general is not sufficiently versed in the complementary roles of air, space, and cyberspace and is unable to command an organization that comprises all three, he/she should not have been promoted to that grade. The Army, Navy, and Marine Corps all have aviation units subordinate to the command of non-pilots and have experienced no ill effects. Unless the Air Force can make senior leadership opportunities a "two-way

² This CDO-type course should only be cursory in nature due to the lack of staying power phenomenon described by Perry in Chapter 4. However, even if a young second lieutenant only retains 20 percent of what he/she has been taught, it will have served its purpose.

street,” the lesser tribes will continue to feel denigrated and cultural transformation will not occur.

Finally, the Air Force should significantly reduce its use of the BPZ promotion. At its current rate, the Air Force’s ten percent BPZ selection rate to O-5 and a 15 percent selection rate to O-6 engender negative effects. First, by encouraging specialization in a narrow field, it robs a significant portion of its officers of the critical exposure to the other Air Force warfighting domains they require to become well-rounded officers prior to selection to flag rank. Second, BPZ promotions advance the career development and promotion of *certain* groups of officers. In its current practice, the Air Force is abusing the program established under DOD guidelines. To use more than half of BPZ promotions to advance the careers of a subculture that composes 28% of an organization’s officer corps reinforces the social stratification between the elites and the underclass. Third, the documented favoritism of BPZ promotions toward fighter pilots creates animosity. This animosity impedes acceptance of an organizational unifying cause.

Some sort of institutional identity change will come within the Air Force; it always does. Tribalism within the Air Force will continue to exist. The service’s technophilic focus and occupational alignment along technological lines ensures that tribes will endure for as long as the Air Force endures. Tribal competition, in moderation, can be healthy. But too much tribal conflict can imperil an organization. It is unacceptable in a military institution upon which such a large part of the nation’s defense depends.

General McPeak may have had a point in the quotation at this chapter’s beginning when he attempted to justify his preference for placing fighter pilots in key Air Force positions. His statement draws attention to the popular metaphor of the traditional “warfighter” Airman of the CAF. The purpose of the Air Force is to generate combat capability and to win our nation’s wars. Though somewhat ironic, the sage insight of General Moseley’s epigraph is more relevant to today’s Air Force. The changing character of warfare generated by new technologies has empowered the “rising” delphic, mobility, special operations, and support tribes and potentially elevated them into the elite warrior-class. No longer is the competition for organizational dominance limited to

combat pilots of the bomber and fighter tribes. In tomorrow's air, space and cyberspace environment, combat aviators will increasingly find themselves sharing the operator spotlight with UAV pilots, space controllers, and information warriors, all of whom should possess a common operational-level responsibility and outlook. Therefore, to succeed—indeed, to avoid significant failure—the Air Force must redefine itself for the 21st century and incorporate the “rising” tribes into an all-inclusive institutional identity. Only then will the Air Force be able to respond effectively to the changing external security environment of tomorrow and avoid the pitfalls of the past.

Appendix A

Air & Space Basic Course Program Learning Areas

Source: Manual for Air and Space Basic Course (MASBC) 001, *Air & Space Basic Course Syllabus*, 4 March 2010, 6.

1. Profession of Arms. At the initial level, issues related to officership, moral and ethical development, accountability, and other responsibilities related to the military profession are raised to a high level of learning (typically the application level). Officers are expected to display the unique traits that separate military professionals from their civilian counterparts.

2. Warfare Studies. Emphasis at the initial level of PME is at the company-grade and tactical level of warfighting. Officers should understand the role of small teams in expeditionary operations, but should also be able to communicate the overall mission of the Air Force in all of its operational domains. Taken together, the breadth of topics addressed at the initial level imbues new Air Force officers with the attitude, tools, and knowledge essential for excellence at the unit level.

3. Leadership Studies. The focus of Leadership Studies at the initial level of PME is on team leadership – the tactical-level operations – in order to provide the tools these officers will need to build and lead small teams as well as to serve as dynamic followers. The courseware addresses concepts and philosophies these officers can use to improve individual leadership skills and group dynamics, as well as individual and group performance. Students learn adaptive leadership styles in order to capitalize on opportunities and overcome challenges presented by the situation, the requirements of the mission, and the abilities of peers and followers. Officers at this level are provided opportunities to apply the concepts and techniques they have learned.

4. International Security Studies. The emphasis at the initial level is on those aspects of national and international security affairs that provide the broad context within which junior officers and their superiors must operate. Special attention is paid to those national and international security topics that most affect an officer's ability to lead and follow, to

communicate, and to understand what it means to be an Airman in today's globalized environment.

5. Communication Studies. Communications Studies at the initial level amplifies instruction received at the precommissioning level and provides opportunities to apply the principles of effective communication in giving and receiving feedback. Special attention is given to those listening, speaking, writing and interpersonal communication skills instrumental to successful team building. Interpersonal communications instruction emphasizes maximizing individual members' potential for the benefit of the entire team. Officers at this level learn to organize and present well-reasoned and well-supported arguments, both in written and spoken form.

Appendix B

Air Force MAJCOM Force Structure

Source: Information derived from <http://www.af.mil/information/bios/results.asp> (USAF General Officer Biographies) and the “Major Commands 2009 USAF Almanac” located at <http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509MajCom.pdf>

-  **Air Combat Command (ACC)**, GEN William M Fraser III (Bomber)
 -  **First Air Force**, MG Garry C. Dean (Fighter)
 -  **Ninth Air Force**, MG William L. Holland (Fighter)
 -  **Twelfth Air Force**, LTG Glenn F. Spears (Bomber)
 -  **United States Air Force Warfare Center**, MG Stanley T. Kresge (Fighter)
-  **Air Education and Training Command (AETC)** GEN Stephen R. Lorenz (Mobility)
 -  **Second Air Force**, MG Mary K. Hertog (Support)
 -  **Nineteenth Air Force**, MG Gregory A Feest (Fighter)
 -  **Air Force Recruiting Service**, BG Alfred J. Stewart (Mobility)
 -  **Air University**, LTG Allen G. Peck (Fighter)
 -  **Wilford Hall Medical Center**, MG Thomas W. Travis (Medical Officer)
-  **Air Force Global Strike Command (AFGSC)**, LG Frank Klotz (Delphic)
 -  **Eighth Air Force**, MG Floyd L. Carpenter (Bomber)
 -  **Twentieth Air Force**, MG Roger W. Burg (Delphic)
-  **Air Force Materiel Command (AFMC)**, GEN Donald J. Hoffman (Fighter)
 -  **Aeronautical Systems Center**, LTG Thomas J. Owen (Support)
 -  **Air Force Flight Test Center**, MG David Eichhorn (Bomber)
 -  **Air Force Global Logistics Support Center**, MG Gary T. McCoy (Support)
 -  **Air Force Nuclear Weapons Center**, BG Everett H. Thomas (Delphic)
 -  **Air Force Research Laboratory**, MG Ellen M. Pawlikowski (Support)
 -  **Air Force Security Assistance Center**, BG Joseph A. Lanni (Fighter)
 -  **Air Armament Center**, MGEN David W. Eidsaune (Fighter)
 -  **Arnold Engineering Development Center**, Col Arnold F. Huber II
 -  **Electronic Systems Center**, LTG Ted F. Bowlds (Support)

-  **Air Force Reserve Command (AFRC)** LTG Charles E. Stenner (Fighter)
 -  **Fourth Air Force**, MG Eric W. Crabtree (Navigator to Mobility pilot)
 -  **Tenth Air Force**, MG Frank J. Padilla (Mobility)
 -  **Twenty-Second Air Force**, MG Martin W. Mazick (Mobility)
 -  **Air Reserve Personnel Center**, MG K.C. McClain (Support)
-  **Air Force Space Command (AFSPC)**, GEN Claude Robert Kehler (Delphic)
 -  **Fourteenth Air Force**, LTG Larry D. James (Delphic)
 -  **Twenty Fourth Air Force**, MG Richard E. Webber (Delphic)
 -  **Space and Missile Systems Center**, LTG John T. Sheridan (Delphic)
 -  **Space Innovation and Development Center**, Col Tish Norman
-  **Air Force Special Operations Command (AFSOC)**, LTG Donald C. Wurster (Special Ops)
 -  **Twenty-Third Air Force**, BG Marshall B Webb (Special Ops)
 -  **Special Operations Training Center**, Col Mark Alsid
-  **Air Mobility Command (AMC)**, GEN Raymond E. Johns, Jr (Mobility)
 -  **Eighteenth Air Force**, MG Winfield W. Scott III (Mobility)
 -  **United States Air Force Expeditionary Center**, MG Kip L. Self (Mobility)
-  **United States Air Forces in Europe (USAFE)**, GEN Roger A. Brady (Mobility)
 -  **Third Air Force**, LTG Frank Gorenc (Fighter)
 -  **Seventeenth Air Force**, MG Ronald L. Ladnier (Mobility)
-  **Pacific Air Forces (PACAF)**, GEN Gary L. North (Fighter)
 -  **Fifth Air Force**, LTG Edward A. Rice Jr (Bomber)
 -  **Seventh Air Force**, LTG Jeffrey A. Remington (Fighter)
 -  **Eleventh Air Force**, LTG Dana T. Atkins (Fighter)
 -  **Thirteenth Air Force**, LTG Herbert J. Carlisle (Fighter)

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- This document describes how the Air Force is organized and contains historical information on the service's senior leadership through the years, personnel and equipment end-strength, and budget allocation percentage by service.

Air Force Magazine. "Major Commands 2009 USAF Almanac." <http://www.airforce-magazine.com/MagazineArchive/Magazine%20Documents/2009/May%202009/0509MajCom.pdf>.

- This document depicts the administrative and organizational structure of the Air Force.

Air Force Personnel Center's official Web site. "Active Duty Demographics." <http://www.afpc.randolph.af.mil/library/airforcepersonnelstatistics.asp>.

- This site provides a quarterly snapshot of the active duty officer and enlisted force demographic information.

Air Force Personnel Center's official Web site. "Active Duty Officer Promotions Line of the Air Force (LAF) Historical."

<http://wwa.afpc.randolph.af.mil/demographics/reportSearch.asp>

- This document is found on this site and contains promotion selection rates and numbers since FY89 for O-4 to O-6 by occupation.

Air Force Personnel Center's official Web site. "Air Force Personnel Statistics."

<http://wwa.afpc.randolph.af.mil/demographics/reportSearch.asp>.

- This document is found on this site and contains Air Force Officer Demographics by Field, Rank, and Gender.

Air Force Reserve Command's official Web site. <http://www.afrc.af.mil/index.asp>.

Air Mobility Command's official Web site. <http://www.amc.af.mil/>.

Air University official Web site. "Air and Space Basic Course."

<http://www.au.af.mil/au/soc/asbc.html>.

- This site contains the four stated goals the ASBC accomplishes through shared experiences.

Baquet, Maj John. Interview by the author, 06 May 2010.

- 14-year active duty Air Force logistics officer.

Eisen, Dr. (Col-Ret.) Stefan. Interview by the author, 7 December 2009.

- Current Director of the Air Force Negotiations Center of Excellence.
- Developed the ASBC's curriculum and was its first commander.

Fife, LTC Mike. Interview by the author, 7 May 2010.

- 15-year active duty US Army Infantry and Logistics Officer.

Flanigan, Lt Col Ericka. Interview by the author, 06 May 2010.

- 15-year active duty Air Force intelligence officer.

Gates, Secretary Robert M., secretary of defense, Department of Defense. "Next-War-it is." Address. Colorado Springs, CO, 13 May 2008.

<http://smallwarsjournal.com/blog/2008/05/secretary-gates-on-nextwaritis>.

Heberer, CDR Phil. Interview by the author, 7 May 2010.

- 23-year active duty US Navy naval flight officer.

Lightfoot, Lt Col Stephen J., Executive Officer, The Basic School, Quantico Marine Corps Base, VA. Telephone interview by the author, 04 May 2010.

Naval Historical Center. "Biographies in Naval History,"

<http://www.history.navy.mil/faqs/faq35-1.htm>

- This site holds biographical information on all US Navy Chief of Naval Operations.

Perry, Col (Ret) Richard "Kemo." Interview by the author, 7 May 2010.

- The commander of the ASBC in 2004 and was an F-15E pilot who served in the Air Force for 22-years.

Schultz, Timothy P., Commander, School of Advanced Air and Space Power Studies, Maxwell AFB, AL. To the author. E-mail, 18 December 2009.

Short, Lt Gen Michael C. To the author. E-mail, 27 May 2010.

- Former commander, Allied Air Forces Southern Europe, Stabilization Forces Air Component and Kosovo Forces Air Component, Naples, Italy, and 16th Air Force and 16th Air and Space Expeditionary Task Force, U.S. Air Forces in Europe. Over the course of his 35-year Air Force career, he accumulated over 4600 flight hours in the A-7, A-10, F4-C/D/E, F-15E, F-16C, F-102, F-106, F-117 and RF4-C.

Solomon, Col David., Vice Commandant, Air Command and Staff College, Maxwell AFB, AL. Interview by the author, 7 May 2010.

- 27-year active duty Air Force F-15C pilot.

Stafford, Dr. Matthew C., Chief Academic Officer, Squadron Officer College, Maxwell AFB, AL. To the author. E-mail, 7 May 2010.

Stafford, Dr. Matthew C., Chief Academic Officer, Squadron Officer College, Maxwell AFB, AL. To the author. E-mail, 24 May 2010.

Stafford, Dr. Matthew C., Chief Academic Officer, Squadron Officer College, Maxwell AFB, AL. To the author. E-mail, 25 May 2010.

Stamper, CDR Chris. Interview by the author, 07 May 2010.

- 21-year active duty US Navy helicopter pilot.

Stapleton, LCDR John. Interview by the author, 6 May 2010.

- 23-year active duty P-3 pilot. Prior to commissioning, he was enlisted and spent nine years serving aboard ships.

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- This site contains the Airman's Creed.

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<http://www.airforce.com/learn-about/our-mission>.

- This site contains the mission statement, recruiting slogan and the three core competencies of the Air Force.

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- This Cornell University Law School website delineates the ratio of one-star, two-star, three-star, and four-star general officers the Air Force can possess at any one time by law.

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